

Bonneville County - Idaho Wildland/Urban Interface Fire Mitigation Plan



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Bonneville County Idaho Wildland/Urban Interface Fire Mitigation Plan

PROMULGATION OF ADOPTION

Be it known that the Bonneville County Idaho Board of County Commissioners do hereby approve the adoption of the Bonneville County Idaho Wildland/Urban Interface Fire Mitigation Plan and direct its implementation through the creation of a Bonneville County Wildland/Urban Interface Advisory Committee.

Be it also known that the Board of County Commissioners hereby appoints Commissioner David Radford, in his role as County Commissioner, as the Bonneville County Wildland/Urban Interface Advisory Committee Chair.

This plan has been developed in the interest of providing fire mitigation protection to populations living in the wildland/urban interface. Through adoption of this Plan, all county and private agencies are requested to develop directives, Standard Operating Procedures, checklists or other supplemental guidance to insure its maximum effectiveness.

Bonneville County Commissioner

Date

Bonneville County Commissioner

Date

Bonneville County Commissioner

Date

**BONNEVILLE COUNTY IDAHO
WILDLAND/URBAN INTERFACE FIRE MITIGATION PLAN**

PLAN REVIEWERS

The mission of the Bonneville County Wildland/Urban Interface Fire Mitigation Program is to promote public policy designed to protect citizens, critical facilities, infrastructure, private property, and the environment from wildfires. The following representatives have reviewed the plan and provided input.

_____ Keith Birch – Idaho Department of Lands	_____ Date
_____ Kevin Conran – BLM	_____ Date
_____ Michael S. Taysom – Director of Emergency Management	_____ Date
_____ Dean Philbrick – Swan Valley Fire District	_____ Date
_____ Kirt Hayes – Central Fire District	_____ Date
_____ Clarence Nelson – Ammon Fire Department	_____ Date
_____ Dean Ellis – Idaho Falls Fire Chief	_____ Date
_____ Jared Loosli – Ucon Fire Chief	_____ Date
_____ Kim Ragotzkie – Idaho Fish and Game	_____ Date

**BONNEVILLE COUNTY IDAHO
WILDLAND/URBAN INTERFACE FIRE MITIGATION PLAN**

PLAN REVIEWERS (Continued)

The mission of the Bonneville County Wildland/Urban Interface Fire Mitigation Program is to promote public policy designed to protect citizens, critical facilities, infrastructure, private property, and the environment from wildfires. The following representatives have reviewed the plan and provided input.

_____ Terri Potter – Alpine Fire District	_____ Date
_____ Kraig Carroll – Forest Service	_____ Date
_____ Dennis Godfrey – Caribou County Fire Dept.	_____ Date

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Bonneville County - Idaho

Wildland/Urban Interface Fire Mitigation Plan

Executive Summary And Action Plan

November 19, 2004

Executive Summary and Action Plan

The mission of the Bonneville County Wildland/Urban Interface Fire Mitigation Program is to promote public policy designed to protect citizens, critical facilities, infrastructure, private property, and the environment from wildfires. The Bonneville County Wildland/Urban Interface Fire Mitigation Plan, developed as a foundational element of the Program, addresses privately held unincorporated urban and rural areas of the county and their interface points with Federal or State Lands such as the Caribou Targhee National Forest or the Idaho National Engineering and Environmental Laboratory.

This Plan establishes an action plan for mitigating the impacts associated with wildfires. If implemented over the next several years, the actions identified in this plan will help reduce the damages caused by wildfire in the wildland/urban interface. However, it is up to the community to ensure that these actions are taken. All mitigation is local, and the primary responsibility for development and implementation of risk reduction strategies and policies lies with the identified local and federal jurisdictions. No plan is complete until it is implemented.

The county wildland/urban interface areas were all assessed during the summer of 2004. Based on the findings of the assessment, the assessment team geographically organized eight (8) areas of risk or vulnerability zones; then ranked them according to four criteria; Life Safety, Property Damage, Environmental Damage, and Economic Impact. The listing of the respective zones, and the identified mitigation implementing actions presented below, represent a summary of the Bonneville County Wildland/Urban Interface Mitigation Program Action Plan.

WUI Zone 1 – Hoffman Estates/McCoy Creek Road Area – High Risk

Short Term Actions:

- ✓ Develop a wildland/urban interface public education program.
- ✓ Develop a fuels reduction program.
- ✓ Apply for grants to procure equipment used for mechanical treatment projects.
- ✓ Develop a static water source.
- ✓ Develop an evacuation plan.

Long Term Actions:

- ✓ Improve the Forest Service road into Hoffman Estates

WUI Zone 2—North side of Palisades Reservoir from Wyoming Line to Indian Creek – High Risk

Short Term Actions:

- ✓ Develop a wildland/urban interface public education program.
- ✓ Improve roadways and develop evacuation procedures.
- ✓ Develop a fuels reduction program.
- ✓ Apply for grants to procure equipment used for mechanical treatment projects.
- ✓ Develop a static water source.

Long Term Actions:

None

WUI Zone 3 – North side of Palisades Reservoir from Indian Creek Road to Swan Valley Fire District Boundary – High Risk

Short Term Actions:

- ✓ Develop a wildland/urban interface public education program.
- ✓ Improve roadways and develop evacuation procedures.
- ✓ Develop a fuels reduction program.
- ✓ Apply for grants to procure equipment used for mechanical treatment projects.
- ✓ Develop a static water source.

Long Term Actions:

- ✓ Expand the Swan Valley Fire District to cover this area.

WUI Zone 4 – Southwest side of Palisades Reservoir including Calamity and Palisades Summer Home Areas – High Risk

Short Term Actions:

- ✓ Develop a wildland/urban interface public education program.
- ✓ Improve roadways and develop evacuation procedures.
- ✓ Develop a fuels reduction program.
- ✓ Apply for grants to procure equipment used for mechanical treatment projects.

Long Term Actions:

- ✓ Expand the Swan Valley Fire District to cover this area.

WUI Zone 5 – South side of Snake River from the Palisades Dam to Fall Creek Road including the Little Lemhi Scout Camp and Ta-Man-A-Wis Scout Camp – High Risk

Short Term Actions:

- ✓ Work with the Bureau of Reclamation to reopen the road below the Palisades Dam for emergency vehicles.
- ✓ Develop a wildland/urban interface public education program.
- ✓ Improve roadways and develop evacuation procedures.
- ✓ Develop a fuels reduction program.
- ✓ Apply for grants to procure equipment used for mechanical treatment projects.
- ✓ Develop a static water source.

Long Term Actions:

- ✓ Reduce Swan Valley Fire Department response times by constructing a bridge across the Snake River at Irwin, Idaho.
- ✓ Build a substation for the Swan Valley Fire District to cover areas on the south side of the Snake River.
- ✓ Expand the boundaries of the Swan Valley Fire District to include areas on the south side of the Snake River.

WUI Zone 6 – Kelly Island riparian area between the north side of the Snake River and the Heise Road – Medium Risk

Short Term Actions:

- ✓ Improve roadways and develop evacuation procedures.
- ✓ Develop a fuels reduction program.

Long Term Actions:

None

WUI Zone 7 – The CRP intermix on the east bench of the county west of Bone Road – From the Ririe Reservoir to the southern County boundary – Medium Risk

Short Term Actions:

- ✓ Develop a wildland/urban interface public education program.

Long Term Actions:

- ✓ Expand the boundary of the Bonneville County #1 Fire District to include unprotected areas.
- ✓ Working with the U.S. Department of Agriculture, develop mitigation measures for CRP grounds in the Bone area.

WUI Zone 8 – The west end of the county from the west boundary of the City of Idaho Falls to the INEEL boundary – Medium Risk

Short Term Actions:

- ✓ Develop a wildland/urban interface public education program.
- ✓ Develop a fuels reduction program.

Long Term Actions:

- ✓ Expand the boundary of the Bonneville Fire District #1 to include unprotected areas west of Idaho Falls to the INEEL boundary.

An economic analysis was conducted on all mitigation projects identified above. The analysis provides a foundation for the Bonneville County Wildland/Urban Interface Fire Mitigation Group and the responsible fire districts to begin mitigation project prioritization. While some projects provide an excellent return on investment other factors must be closely examined in the prioritization process. Life safety issues must always take precedence over costs.

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Section 1: Introduction and Planning Process

The Bonneville County Wildland/Urban Interface Fire Mitigation Plan, hereafter referred to as the Plan, addresses privately held unincorporated urban and rural areas of the county and their interface points with Federal or State Lands such as the Caribou Targhee National Forest or the Idaho National Engineering and Environmental Laboratory. While this Plan does not establish requirements for the city, county, state, or federally held lands, it does provide a framework for the identification of mitigating actions for the common impacts associated with wildfires. The resources and background information in the Plan are applicable countywide, as the goals and recommendations lay groundwork for local mitigation plans and partnerships.

All mitigation is local, and the primary responsibility for development and implementation of risk reduction strategies and policies lies with local jurisdictions. Local jurisdictions, however, are not alone. Partners and resources exist at the state and federal levels. No plan is complete until it is implemented. This Plan describes prescriptive programmatic actions that will bring about mitigation. These mitigation actions, if implemented over the next several years, will help reduce the damages caused by wildfire in the wildland/urban interface. However, it is up to the community to ensure that these actions are taken.

The Plan, and Appendices that follow, are the culmination of work conducted by the Bonneville County Wildland/Urban Interface Fire Mitigation Interagency Planning Group and include a variety of measures designed to reduce the impact of wildfires. The Bonneville County Wildland/Urban Interface Fire Mitigation Plan provides documentation of implementing actions designed to reduce the risk from wildfires through education and outreach programs, the development of partnerships, and implementation of preventative activities such as development of defensive space and mechanical fuel treatments. The resources and information within the Plan:

1. Establish a foundation for coordination and collaboration among agencies and the public in Bonneville County,
2. Identify and prioritize mitigation projects and implementing actions;
3. Assist in meeting the requirements of federal assistance programs.

Program Mission

The mission of the Bonneville County Wildland/Urban Fire Mitigation Program is to promote public policy designed to protect citizens, critical facilities, infrastructure, private property, and the environment from wildfires.

Program Goals

The Bonneville County Wildland/Urban Fire Mitigation Program has established goals that describe the overall direction that county agencies, organizations, and citizens will take toward analyzing and mitigating wildland/urban interface risks from wildfires.

Protect Life and Property

- ❑ Implement activities that assist in protecting lives by making homes, businesses, infrastructure, critical facilities, and other property more resistant to wildfire hazards.
- ❑ Improve hazard assessment information; reduce losses and repetitive damages from hazard events.

- ❑ Improve countywide zoning, building codes, standards for new development, and encouragement of preventative measures for existing development in areas vulnerable to wildfire hazards.

Public Awareness

- ❑ Develop and implement educational outreach programs
- ❑ Provide information on tools, partnership opportunities, and funding resources to assist in implementation of mitigation actions.
- ❑ Develop a system to quickly and effectively communicate impending emergencies to residents of summer home areas.

Natural Systems

- ❑ Balance watershed planning, natural resource management, and land use planning with wildfire mitigation to protect life, property, and the environment.
- ❑ Preserve, rehabilitate, and enhance natural systems to serve wildfire mitigation functions.

Partnerships and Implementation

- ❑ Strengthen communication, and coordinate participation, among and within public agencies, citizens, non-profit organizations, business, and industry to gain a vested interest in implementation.
- ❑ Encourage leadership within public and private sector organizations to prioritize and implement local, county, and regional hazard mitigation actions.

Emergency Services

- ❑ Establish policy to ensure mitigation projects for critical facilities, services, and infrastructure.
- ❑ Strengthen emergency operations by increasing collaboration and coordination.
- ❑ Coordinate and integrate wildfire mitigation activities, where appropriate, with emergency operations plans and procedures.
- ❑ Reduce response time to minimum access areas through improvement/addition of roads and bridges.

Background

Bonneville County received a grant through the Idaho Falls Office of the Bureau of Land Management (BLM) to prepare a Wildland/Urban Interface Fire Mitigation Plan. This plan documents programmatic goals, identifies implementing actions, and sets priorities for reducing wildfire risk.

Wildfire hazard mitigation is the development and implementation of activities designed to reduce or eliminate losses resulting from wildfires. Wildfire mitigation can be used in conjunction with other county plans, including the County Comprehensive Land Use and Emergency Operations Plans. Each county within the state has received a request to write a simple Wildland/Urban Interface Fire Mitigation Plan. These plans are to contain at least the following five elements:

- 1) Documentation of the process used to develop the mitigation plan. This includes how the plan was developed, who was involved, and how the public was involved.
- 2) A risk assessment to identify vulnerabilities to wildfire in the wildland/urban interface (WUI).
- 3) A prioritized mitigation strategy that addresses each of the risks. Examples of these strategies could be:

- ☐ Training for fire departments
- ☐ Public education
- ☐ Hazardous fuel treatments
- ☐ Equipment
- ☐ Communications
- ☐ Additional planning
- ☐ New facilities
- ☐ Infrastructure improvements
- ☐ Code and/or ordinance revision
- ☐ Volunteer efforts
- ☐ Evacuation plans, etc.

- 4) A process for maintenance of the plan that includes monitoring and evaluation of mitigation activities.
- 5) Documentation that the plan has been formally adopted by the involved agencies.

To develop wildfire mitigation plans it is suggested that each county bring together the following individuals, as appropriate for each county, to make up the County Wildland/Urban Fire Interagency Planning Group. This group should contain the following representatives.

- ☐ County Commissioners (Lead)
- ☐ Local Fire Chiefs
- ☐ Idaho Department of Lands representative
- ☐ USDA Forest Service representative
- ☐ USDI Bureau of Land Management representative
- ☐ US Fish and Wildlife representative
- ☐ Idaho Bureau of Homeland Security representative
- ☐ Local Emergency Planning Committee (LEPC) Chairperson
- ☐ Resource Conservation and Development representative
- ☐ Idaho Department of Fish and Game representative
- ☐ Interested citizens and community leaders as appropriate
- ☐ Other officials as appropriate

The planning group, with critical input from homeowners and the general public, will determine where the risks and vulnerabilities to wildland/urban fire are within the county and what mitigation actions are required. County organizations that include most of the identified representatives are already in place in Bonneville County.

In Bonneville County, existing assessments and planning documentation have fulfilled many of the requirements made above, however, the purpose of this planning activity is to integrate existing relevant information into a single place and develop a strategic pathway to fire mitigation implementation.

Project Requirements

The Plan is being written to establish the jurisdiction's commitment to reduce risks from disasters and technological hazards, and to serve as a guide for decision makers as they commit resources to reduce the effects of wildfires upon private property within the designated wildland/urban interface areas.

The project has been outlined and conducted in accordance with the following requirements set forth by the Federal Emergency Management Agency (FEMA).

1. Develop and Document the Planning Process
2. Assess the Risk

3. Develop Mitigation Strategies
4. Develop a Maintenance Process for the Plan

Planning Methodology

Information contained in the Plan is based on research and information taken from a variety of sources. The intention of the planning team is not to duplicate existing information, but rather to integrate resources provided by members of the planning committee.

The Interagency Planning Group is comprised of the following.

Name	Representing
Dave Radford	Bonneville County Commissioner
Mike Taysom	Bonneville County Emergency Management
John R. Therriault	Bonneville County Emergency Management
Jared Loosli	Ucon Fire Chief
Kevin Eckersell	Bonneville County Road and Bridge Supervisor
Janet Cheney	Bonneville County GIS
Robert Jamison	Calamity Summer Home
Norm Showalter	Calamity Summer Home
Dean Soelberg	Sheep Creek Summer Home
B L Page	Sheep Creek Summer Home
Dave Klaehn	Swan Valley Fire District
Dick Fowler	Bonneville Fire District
Matt Morgan	Bonneville Fire District
Dean Ellis	City of Idaho Falls Fire Chief
Don Gosswiller	Bureau of Land Management
Dean Philbrick	Swan Valley Fire District
Toni Philbrick	Swan Valley Fire District
Ron Frazell	Swan Valley Fire District
Keith Birch	Idaho Department of Lands
Steven Serr	Bonneville County Planning & Zoning Director
Kevin Conran	Bureau of Land Management
Kim Ragotzkie	Idaho Department of Fish and Game
Clarence Nelson	Ammon Fire Chief
Wes Jones	Emergency Response Solutions - Project Manager
Rick Fawcett	Emergency Response Solutions - Senior Consultant

Meetings

Planning meetings have been held to gather information and develop natural hazard actions for this plan. Additional meetings will be held with the County Commission, homeowners, and the general public.

Date	Group	Purpose
April 27, 2004	Interagency Planning Group	Planning Meeting
May 10, 2004	Interagency Planning Group	Planning Meeting
June 2, 2004	Interagency Planning Group	Planning Meeting
July 4, 2004	Swan Valley Residents	Public Meeting
July 26, 2004	Interagency Planning Group	Planning Meeting
August 13, 2004	Interagency Planning Group	Planning Meeting
August 31, 2004	Swan Valley Residents	Public Meeting

Public Participation

Public participation is being assured in four specific ways:

- ❑ Ensure ongoing involvement of private homeowners and or representatives from the communities served by this process on the planning committees.
- ❑ Provide access to the Bonneville County Wildland/Urban Interface Fire Mitigation Plan and associated information on the Internet.
- ❑ Notify by mail the property owners who live outside of the county, announcing the development of a plan, the opportunity to review the plan online, inviting them to make comments on the plan, and requesting them to complete a brief questionnaire.
- ❑ Facilitate scheduled public meetings for residents living in the wildland/urban interface areas.

Mitigation Alternatives

Mitigation alternatives and resulting implementing actions are being developed to address the vulnerabilities identified in Section 3. All mitigation alternatives will be analyzed for cost benefit where possible. The resulting benefits will be summarized and provided as part of the final alternative descriptions.

The Wildland/Urban Interface Mitigation (*implementation*) Action Plan is the most important product that will be developed by this process. The Action Plan contained in the Executive Summary is a summary of Section 5 and identifies who is responsible for implementation of the action, what resources are required for implementation, and when the implementation is to be completed.

Plan Contents

Each section of the Plan provides important information and resources to assist in understanding the issues facing the county, its citizens, businesses, and emergency responders. The sections of the Plan work together to create a document that guides the mitigation mission to reduce risk and prevent loss from future wildfires.

The Plan is structured for ease of use and updating. Individuals interested in specific sections of the Plan will find the tabular format easy to negotiate and reference. The ability to update individual sections of the Plan places less financial burden on the county. Decision makers can allocate funding and staff resources to review and update selected sections, thereby avoiding a full update, which can be costly and time-consuming. New data can be easily incorporated, resulting in an evolving mitigation plan that remains current and relevant to Bonneville County.

The Plan is organized as follows:

1. **Executive Summary and Action Plan** - Provides an overview of the mitigation plan and a succinct listing of all implementing actions.
2. **Section 1: Introduction and Planning Process** - Describes mitigation planning requirements and the current planning methodology.
3. **Section 2: Bonneville County Idaho** - Presents a brief overview of Bonneville County.
4. **Section 3: Risk Assessment** - Provides hazard identification, vulnerability, and risk analysis associated with wildfires in Bonneville County.
5. **Section 4: Public Participation** – Provides an overview of public involvement, and documents public input into the planning process.

6. **Section 5: Economic Analysis and Mitigation Actions** - Provides implementing actions developed to address the identified hazards and vulnerabilities. Also, provides the results of the economic analysis completed as part of the alternative selection process.
7. **Section 6: Plan Maintenance** - Provides guidance on plan implementation, evaluation and maintenance.

Plan Adoption

The Bonneville County Board of County Commissioners is responsible for adopting the Plan. Once the Plan has been adopted, copies of the plan will be distributed to all the agencies which participated in the planning effort. To date, the Federal Emergency Management Agency has not reviewed, approved or disapproved of any plans in the state of Idaho.

Coordinating Body

The Bonneville County Wildland/Urban Interagency Planning Group is responsible for coordinating development and implementation of the Five Year Action Plan. This group will undertake the formal review process. The County Commissioners will assign appropriate members of the Wildland/Urban Interagency Planning Group, private property owners, and representatives of resource providing agencies to form the Wildland/Urban Mitigation Advisory Committee. This committee will implement, evaluate and conduct an annual review of the plan. They will meet, at least quarterly, to examine opportunities for implementation of specific mitigation actions and evaluate the implementation process.

Subcommittees may be formed under the direction of the Advisory Committee to further evaluate actions as established and categorized in Section 5. Recommendations will then be made as to specific implementation processes including acquisition of funding and other necessary resources.

Implementation through Existing Programs

The Plan will provide a series of recommendations, which Bonneville County will have the opportunity to implement through existing programs and procedures.

Upon adoption of the initial Plan, the county will continue developing their natural hazard mitigation goals and actions using this document as a baseline of information for the risks associated with wildfires within the county. Within six months of formal adoption of the Plan, the newly formed and appointed Wildland/Urban Mitigation Advisory Committee will review the recommendations listed. This committee will continue to evaluate the feasibility of each strategy, determine the current status, readjust the priorities as necessary, and monitor the progress for implementation.

Section 2: Bonneville County, Idaho

Profile of Bonneville County

Bonneville County, located in Southeastern Idaho, is part of the Upper Snake River Valley. Its eastern border is also the state border of Idaho and Wyoming. Bonneville County is the fourth-largest county in the state and covers 1,822 square miles. Topography varies from broken lava beds and sagebrush-covered desert on the west to agricultural lands and forest in the central and eastern areas of the county. Elevations range from 4,625 to 10,025 feet above sea level. The present population is over 82,522 with most of the people living in and around the Idaho Falls area.

Bonneville County has four fire districts/departments within its boundaries. These include the Ammon Fire Department, Swan Valley Fire District, Idaho Falls Fire Department/Bonneville District #1, and Ucon Fire Department. (See Appendix 3 for a complete profile of each fire district.) Additionally, three other fire districts/departments, which are located in neighboring counties, provide services within Bonneville County: Central Fire District, Alpine Fire District, and Caribou County Fire Department. Caribou County Fire Department is in the process of establishing a formal memorandum of understanding to provide services in Bonneville County. All fire department/district boundaries are represented on maps in Appendix 6.

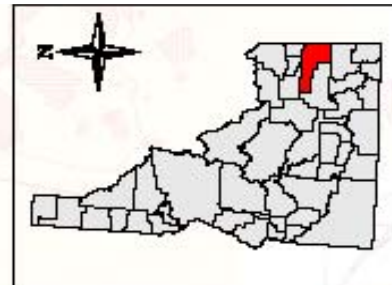
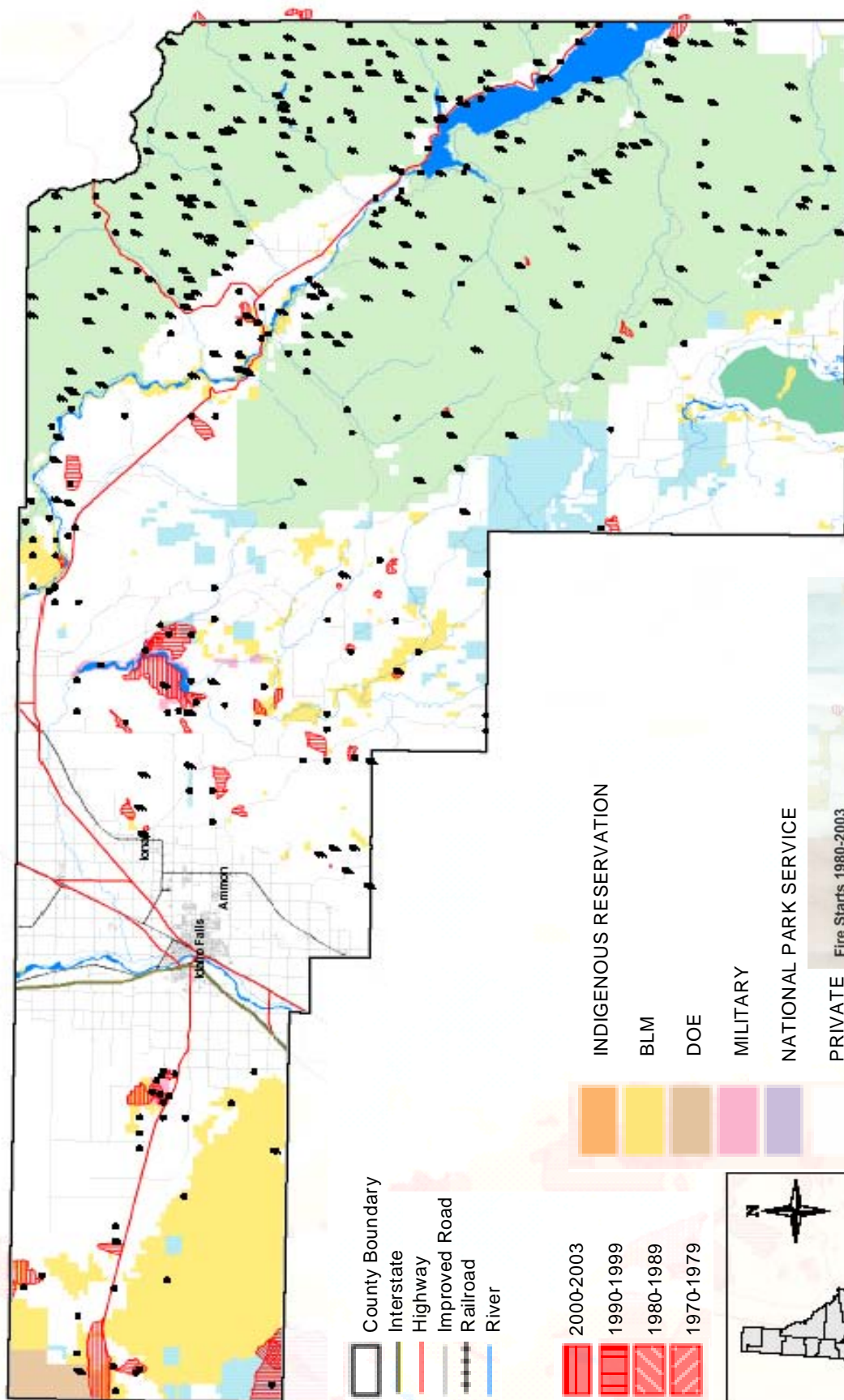
There are approximately 623,145 acres of Federal and 53,694 acres of State land within the boundaries of Bonneville County. Fire protection for Federal and State Lands is the responsibility of the Targhee – Caribou National Forest and the Upper Snake River District of the Bureau of Land Management. For more information regarding fire protection on federal lands see the Targhee-Caribou Fire Plan and the Upper Snake River District Fire Operations Plan.

Fire History:

According to the BLM and the Forest Service, between 1980 and 2003 there were 418 fire starts resulting in roughly 38,000 acres of land burned by wildfires in Bonneville County, however; the actual number may be far greater. These fires are indicated on a map on the following page. A large portion of Bonneville County has no fire protection, so wildfires in these areas are not reported by the BLM, the Forest Service, or the local fire districts. According to the BLM there have been several wildfires, particularly on the eastern foothills, that have been reported to the BLM dispatch that have not been responded to. These fires are typically on privately held lands and are responded to by the private property owners until they threaten structures within fire districts or federal lands.

Of the reported 418 fire starts, 231 were naturally started, usually through lightning strikes, and 187 were human-caused. The naturally started wildfires are typically located in the heavily forested lands in the Palisades area while the human-caused fires are in the high desert areas of the county. There were two significant fires in the Ririe Reservoir area, one in 1983 that was lightning caused and one in 2000 that was human caused. The BLM reports that they annually have a human caused wildfire in the area of the gun range, located off of Highway 20 on the west end of the county. A map of fires over 500 acres, which includes all federally reported fires, is located in Appendix 6. There have been no fires over 500 acres within the Swan Valley Fire District within the last 20 years. Additionally, Bonneville Fire District reports there were no fires over 500 acres within the district for the last 20 years.

Bonneville County Wildfire Mitigation Fire History Map



Fire Starts 1980-2003

Cause	BLM		USFS		Total
	#	Acres	#	Acres	
Natural	28	1582.6	203	14744.7	231
Human	110	21180.3	77	568.4	187
Total	138	22762.9	280	15313.1	418

IA Ownership

	BLM	USFS	Total
Total	231	16327.3	16327.3



This map was created by the Bonneville County Office of Planning and Development for the purpose of wildfire mitigation planning. It is not intended to be used for any other purpose. The map is a draft and subject to change without notice.

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Transportation Routes:

Bonneville County is intersected by Interstate 15, which runs north and south. Highway 20/26 traverses the county east and west with Highway 20 turning northward towards Rigby at the intersection of the Lewisville Highway. Highway 26 continues eastward to the Wyoming state line. Highway 31 intersects with Highway 26 in Swan Valley and proceeds north to Victor, Idaho over the Pine Creek Pass.

From a wildland/urban interface perspective, Highway 20 from Idaho Falls to the INEEL and Highway 26 from Idaho Falls to the Wyoming border are both vulnerable to wildfire. Highway 20 across the INEEL has been closed on several occasions due to wildfires and resulting blowing dust from previous wildfires. Highway 26 from the Swan Valley Bridge to the Wyoming border could potentially be closed due to wildfires.

Recreation Sites:

There are multiple recreation sites in the wildland/urban interface areas of Bonneville County. The most significant and high use sites are in the Ririe Reservoir, Swan Valley, and Palisades areas. Campgrounds, Recreational Vehicle (RV) parks, and boat launches are found at either end of the Ririe Reservoir and along the Snake River and Palisades Reservoir. Additionally, there are campgrounds and outfitter base camps in Caribou Basin and Jack Knife.

Summer Home Subdivisions:

A number of summer home subdivisions are located in the wildland/urban interface in the Swan Valley Fire District. Additional subdivisions are found along Highway 26 between the Palisades Dam and Wyoming in non-protected areas of Bonneville County. These subdivisions are typically within the defined wildland/urban interface areas.

Conservation Reserve Program Lands

The Conservation Reserve Program encourages farmers to convert highly erodible cropland or other environmentally sensitive acreage to vegetative cover, such as domestic or native grasses, wildlife plantings, trees, filterstrips, or riparian buffers. Farmers receive an annual rental payment for the term of the multi-year contract. Cost sharing is provided to establish the vegetative cover practices.

Palisades Dam/Electrical Power Generation:

Located on the Snake River about 55 miles southeast of Idaho Falls, Idaho, the Palisades Dam, operated by the Bureau of Reclamation, is a large zoned earth filled structure 270 feet high. The dam has a crest length of 2,100 feet, and contains 13,571,000 cubic yards of material. It creates a reservoir of 1,401,000 acre-feet capacity (active 1,200,000 acre-feet). Electrical power transmission lines leaving the Palisades Power Plant cross national forest and private lands within the wildland/urban interface areas. The electrical power generated at the Palisades Dam is a significant portion of the electrical power distributed in the northwest United States.

Section 3: Hazard, Vulnerability and Risk Assessment

Bonneville County Wildland-Urban Interface

According to a study conducted by the Spatial Analysis for Conservation and Sustainability Laboratory, Forest Ecology & Management University of Wisconsin – Madison, Bonneville County Wildland/Urban Interface (WUI) is composed of both interface and intermix communities. According to NFPA Standard 3.3.28, Wildland Urban Interface is defined as “an area where improved property and wildland fuels meet at a well defined boundary.” NFPA Standard 3.3.29 defines Wildland Urban Intermix as “an area where improved property and wildland fuels meet with no clearly defined boundary.”

The expansion of the Wildland/Urban Interface (WUI) in Bonneville County in recent decades has significant implications for wildfire management and impact. The WUI creates an environment in which fire can move readily between structural and vegetation fuels. This assessment examines specific areas in Bonneville County that have been defined as part of the WUI. A map depicting Wildland/Urban Interface areas is located in Appendix 6. Additionally, an Idaho Department of Lands map is located in Appendix 6. This map depicts rankings of which communities are at risk to the effects of wildfire. The map integrates fire ignitions, fire weather, fire behavior and wildland urban data. A county vegetation map is also included in Appendix 6.

Hazards

Wildfire –Wildfire is an unplanned or unwanted natural or human-caused fire, or a prescribed fire that escapes its bounds.

Drought - Drought, a *prolonged period of dryness*, is a normal part of almost every climate and is actually defined in many different ways. Environmental impacts of drought are the result of damages to plant and animal species, wildlife habitat, and air/water quality; forest and range fires; degradation of landscape quality; and soil erosion. On May 20, 2004 a Drought Declaration was issued for Bonneville County and approved by the Governor. The drought has lasted several years affecting Bonneville County and essentially all of southeastern Idaho. Also, it has significantly exacerbated the wildfire danger on public lands and within the wildland/urban interface.

Landslide -Landslides occur when masses of rock, earth, or debris move down a slope. Sloping areas where wildfires or human modifications of the land have destroyed vegetation are particularly vulnerable to landslides during and after heavy rains. While there have not been any recent significant landslides within the wildland/urban interface area, landslides are a potential significant hazard along Highway 20 from the Palisades Dam to the Wyoming line if vegetation is removed as a result of a wildfire in this area.

Lodge Pole Pine - Areas on the east end of the Palisades Reservoir are experiencing increases in hazardous fuel loading, primarily created from an active attack of Mountain Pine Beetle (MPB). This is a naturally occurring phenomenon, brought about by lack of fire within the area for extensive periods of time.

Vulnerabilities

The following general categories were examined in detail to determine specific vulnerable areas within Bonneville County:

- Developed recreation sites
- Summer home sites
- Designated communication sites

- Municipal watersheds
- Private land with structures
- Timber areas
- Above-ground utility corridors
- High-use travel corridors
- Historic areas
- Range land
- Wildlife habitat
- Conservation Reserve Program (CRP) land

The following specific areas within the county were assessed, and have the following findings. See Appendix 7, Bonneville County Hazard Identification for additional pictures of the assessed areas. Once the areas were assessed they were placed in appropriate vulnerability zones.

Hoffman Estates/McCoy Creek Road Area – WUI Zone 1 – High Risk

There are 5 homes along the McCoy Creek Road between the Wyoming border and the entrance to the Hoffman Estates area. The homes are in the Alpine Fire Protection District; some homes are



located in Bonneville County, while others are located in Wyoming. A wildfire occurred in this area in 2002. There has been significant improvement in the development of clear, green space around the structures however, there is still significant fuel loading in the interface area. The fuel loading is a combination of beetle-killed lodge pole pine and other pines killed by the previous fire. There currently are some fuel removal activities occurring along McCoy Creek Road. A



court decision will be necessary to determine the status of McCoy Creek Road as a Forest Service or County Road.

The Hoffman Estates Summer home area is located on leased Forest Service land, and is a gated community. There are significant hazards in this area. There is a total lack of planning for defensible space. Also, the roads are extremely narrow. Fire apparatus would have difficulty responding to most of the properties. There are no water supplies for fire suppression. Most home sites have only one way in and out. It would very difficult to warn and evacuate this subdivision. The area has mixed construction – trailers, cabins, and custom homes.

Lodge Pole Lane Area – WUI Zone 2 – High Risk



There are a number of summer homes on the north side of Highway 20 between the Wyoming line and Indian Creek Road that are extremely vulnerable. The area has a significant concentration of dead and dying lodge pole pine as well as heavy fuel loading from light brush and grasses. Most of the home's entrances are gated, and the entrance roads are steep and poorly maintained. This area is in the Alpine Fire District boundary.

Sheep Creek/Salisbury Estates Summer Home Area – WUI Zone 3 – High Risk



There are significant hazards in this area. There is a total lack of planning for defensible space. Also, the roads are narrow and steep. Fire apparatus would have difficulty responding to most of the properties. There are no water supplies for fire suppression. Most home sites have only one way in and out. It would very difficult to warn and evacuate this subdivision. The area has mixed construction – trailers, cabins, and custom homes. Homes located at the top of the mountain were inaccessible due to locked gates.

Bills Road Summer Home Area – WUI Zone 3 – High Risk

There are significant hazards in this area. There is a total lack of planning for defensible space; the roads are narrow and steep. Fire apparatus would have difficulty responding to most of the properties. There are no water supplies for fire suppression. Most home sites have only one-way in and out. It would very difficult to warn and evacuate this subdivision. The area has mixed construction – trailers, cabins, and custom homes. The fuel loading is dense with plenty of fine fuels including seasonal grasses and brush. Quaking aspen and conifers are also present.



Lakeview Drive Summer Home Area – WUI Zone 3 – High Risk

There are approximately 30 homes in this subdivision. Most have metal roofs. No defensible space planning is apparent. There is a significant amount of fuels present including fine brush and seasonal



grasses. Quaking aspen and conifer trees are interspersed throughout. The road is fairly wide and well maintained. The area is passable for some equipment such as small fire apparatus. However, the grade is greater than ten percent. There are no water supplies for fire suppression. Most home sites have only one way in and out. It would very difficult to warn and evacuate this subdivision. The area has mixed construction – trailers, cabins, and custom homes. According to the Bonneville County Assessor, the value of the property in this area is in excess of \$1,900,000. This property is located outside of a fire protection district.

Calamity and Palisades Summer Home Area – WUI Zone 4 – High Risk

There are significant numbers of homes in these two subdivisions. This subdivision is located on the southwest end of the Palisades Reservoir. The area is easily accessible, however, because the entrances to the subdivisions are gated, a detailed analysis was not conducted. There is a dense canopy, and according to the hazard analysis conducted by the Swan Valley Fire District, little if any defensible space around the structures.



Falls Creek Road/Snake River Road – WUI Zone 5 – High Risk



There are 16 homes on the south side of the river. The Swan Valley Fire District reports that it would take approximately 45 minutes to respond to the south side of the river from Irwin. There are 7 homes in a little community that all seem to have instituted defensible space programs with plenty of green space surrounding them. The remaining homes do not have sufficient defensible space. According to the Bonneville County Assessor, the value of the homes on the south side of the river is in excess of \$1,600,000.

Little Lemhi Scout Camp – WUI Zone 5 – High Risk

The Boy Scouts of America operate a Scout Camp on the south side of the Snake River below Palisades Dam. The area has heavy fuel loading, including fine brush, seasonal grasses, quaking aspen and pine groves. During the summer months there are between 120 and 350 youth and leaders in the camp. The Camp does not have a fire protection system but does train the scouts and leaders on fire prevention techniques. The camp has a warning and evacuation plan and provides the information to all campers.



Ta-Man-A-Wis Scout Camp – WUI Zone 5 – High Risk

The Ta-Man-A-Wis Girl Scout Camp is located on Long Gulch Road in Zone 5. The area has dense fuel loading with fine brush, seasonal grasses, quaking aspen and conifer groves located throughout the property. There is a lack of defensible space around buildings. Safety areas and an evacuation plan need to be developed.

Kelly Island Recreation Area – WUI Zone 6 – Medium Risk

This area is part of riparian zone along the south side of the Snake River above Heise. There is significant fuel loading in the area including Cottonwoods and Poplar Trees, Sage, Juniper, and other light brush and grasses. The area is used primarily as a camping area; there are no significant structures in the area. However, it would be difficult to evacuate if a fast-moving fire occurred in the riparian zone.



Bone Area – WUI Zone 7 – Medium Risk

The Bone area, located on the east mountain benches of Bonneville County, has a mixture of fire hazards. This includes an abundance of CRP land intermixed with private dry-farm land. Most homes are built in pockets of quaking aspen. There is heavy fire loading in the remote reaches of the Willow Creek Canyon. Fires starting in the Canyon would be difficult to respond to and would move quickly to CRP grounds bordering the canyon. There is no fire protection in the Bone area.

Ririe Reservoir – WUI Zone 7 – Medium Risk

Thick juniper canopy surrounding the campground presents a possible hazard. If a fire were to occur in the junipers it would require the immediate evacuation of the campground. There is only one other home past the campground – it appears to have sufficient defensible space. There is no established fire protection in this area.



West End of Bonneville County – WUI Zone 8 – Medium Risk

The west end of Bonneville County has a mixture of agriculture and high desert lands. A large portion of the land is covered with an ancient lava flow. The extreme end of the county covers a small portion of the Idaho National Engineering and Environmental Laboratory. There have been frequent wildfires at the gun range located adjacent to Highway 20.



Antelope Flats –Not Determined to be Vulnerable

In the Antelope Flats area, along Highway 26, there are some farm homes located at the edge of the farmland and quaking aspen groves. These homes are surrounded by quaking aspen trees, which have been deemed a “natural firebreak.” Of some concern, is the area of concentrated conifers coming up out of the south fork canyon onto farmland. If a fire were to occur in the riparian zone along the river, the fire could move quickly upslope into private farmlands.

Pine Creek – Not Determined to be Vulnerable

There are no homes or structures beyond the Pine Creek Bridge up to Forest Service property along Highway 31. The main property in this area is the Pine Creek Ranch. The ranch has incorporated defensible space around their structures.

Palisades Creek Homes – Not Determined to be Vulnerable

There are numerous homes along this route (approximately twenty or more). Many are located within the riparian zone that borders National Forest property. There are dense, small fuels such as grasses and brush. Cottonwoods are the primary vegetation type. No defensible space planning is apparent. The road provides easy accessibility. There are some new homes on the west side of the road. These homes are located within fairly open areas consisting mainly of grasses and sage.

Birch Creek Road – Not Determined to be Vulnerable

There are approximately 8 homes along the Birch Creek Road. A mixture of farmland, CRP land, and forested lands surrounds the homes. There is no defensible space planning in the area.

Grays Lake/Wayan – Not Determined to be Vulnerable

The Wayan and Grays Lake areas are located in the eastern reaches of Bonneville County. Fire protection, provided by Caribou County, is limited. No defensible space planning is apparent in the area.

Swan Valley Fire District

Swan Valley Fire District personnel conducted a hazard survey in early mid May 2004 of the summer home areas covered by the district. Pictures taken during the assessment are included in Appendix 7. The following issues were identified:

- ❑ Unprotected areas in the county outside of the district.
- ❑ Forty-five minute response times to the south side of the Snake River.
- ❑ Lack of public education with summer home residents.
- ❑ Need for mechanical treatment and the requisite funding.
- ❑ Absentee vacation homeowners.
- ❑ Need for secondary evacuation routes from summer homes and subdivisions.
- ❑ Need for water storage and supply in the Swan Valley area.
- ❑ Need for requirements for protection on leased forestlands.
- ❑ Burn permits; refuse collection, removal, and disposal.
- ❑ Lack of pre-fire planning in rural areas of the county such as the following subdivisions:
 - Sheep Creek
 - McCoy Creek

WUI Zone 2—North side of Palisades Reservoir from Wyoming Line to Indian Creek – High Risk

- ✓ Dead Lodge Pole Pine
- ✓ Dense light fuels
- ✓ No defensible space
- ✓ Inaccessible roadways
- ✓ No static water supply
- ✓ One way in and out
- ✓ No evacuation planning

WUI Zone 3 – North side of Palisades Reservoir from Indian Creek Road to Swan Valley Fire District Boundary – High Risk

- ✓ Dense light fuels
- ✓ No defensible space
- ✓ Inaccessible roadways
- ✓ No static water supply
- ✓ No established fire protection district
- ✓ One way in and out
- ✓ No evacuation planning

WUI Zone 4 – South West side of Palisades Reservoir including Calamity and Palisades Summer Home Areas – High Risk

- ✓ Heavy fuel loading
- ✓ No defensible space
- ✓ No static water supply
- ✓ No established fire protection
- ✓ No evacuation planning

WUI Zone 5 – South side of Snake River from the Palisades Dam to Fall Creek Road including the Little Lemhi Scout Camp and Ta-Man-A-Wis Scout Camp – High Risk

- ✓ Heavy Fuel Loading
- ✓ Very little defensible space
- ✓ Static water supply difficult to reach
- ✓ Long response time
- ✓ No evacuation planning

WUI Zone 6 – Kelly Island riparian area between the north side of the Snake River and the Heise Road – Medium Risk

- ✓ Extreme fuel loading
- ✓ No defensible space
- ✓ No established fire protection
- ✓ No evacuation planning – extremely difficult to evacuate

WUI Zone 7 – The CRP intermix on the east bench of the county west of Bone Road between Ririe Reservoir and the southern County boundary – Medium Risk

- ✓ Significant CRP intermix
- ✓ No established fire protection

WUI Zone 8 – The west end of the county from the west boundary of the City of Idaho Falls to the INEEL boundary – Medium Risk

- ✓ Significant light fuel loading
- ✓ No established fire protection

Risk Ranking

Table 1 is the evaluation of risk probability versus consequence for each of the WUI Zones identified above. The table compares the identified hazard with the potential threat to life, property, and the environment. The ranking criteria are presented in Table 2.

Table 1 Ranking

Risk Analysis				
Identified Hazards	Life Safety	Property Damage	Environmental Damage	Economic Impact
WUI Zone 1	High	High	High	Low
WUI Zone 2	High	High	High	Low
WUI Zone 3	High	High	High	Low
WUI Zone 4	High	High	High	Low
WUI Zone 5	High	High	High	Low
WUI Zone 6	High	Low	Medium	Low
WUI Zone 7	Medium	Medium	Medium	Medium
WUI Zone 8	Medium	Medium	Medium	Medium

Table 2 Criteria

Consequence Criteria		
Life Safety	Low	Injuries limited to the area of effect. < 10
	Medium	Serious injuries >10
	High	Multiple fatalities, critical and serious injuries
Property Damage	Low	Minimal damages
	Medium	Structural damages evident
	High	Loss of structure
Environmental Damages	Low	Minimal impact at area of effect
	Medium	Regional damage
	High	Long-term recovery. Requires significant after action
Economic Impact	Low	Economic impact minimal
	Medium	Loss of business
	High	Regional long-term loss

Section 4: Public Participation

The *key to successful implementation* of the Fire Mitigation Program is involvement from the private property owners in Bonneville County and the public who participate in the recreation and tourism within the confines of the county. The public participation process is being assured in four specific ways.

- ❑ Ensure ongoing involvement of private homeowners and/or representatives from the communities served by this process on the planning committees.
- ❑ Increase availability of the Bonneville County Wildland/Urban Interface Fire Mitigation Plan and associated information by placing it on the Internet.
- ❑ Correspond with non-resident property owners announcing the development of a wildland/urban interface program and requesting them to complete a brief questionnaire.
- ❑ Facilitation of scheduled public meetings for residents living in the wildland/urban interface areas.

Public Involvement:

The Bonneville County Wildland/Urban Interface Fire Mitigation Interagency Planning group has actively announced planning meetings during the development of this Plan. The Group has welcomed individual homeowners and representatives from homeowners associations to all of its meetings, and has asked for input of issues facing the homeowners in the interface areas. The Group will continue to work with homeowners during the implementation of mitigation alternatives and in the annual review and assessment of the Plan.

Information developed during the planning process, such as meeting minutes, drafts of the Plan, hazard maps, and other information will be placed on the ERS website for review by the general public as it is completed. Once the Plan is completed, it will be placed on the Bonneville County homepage.

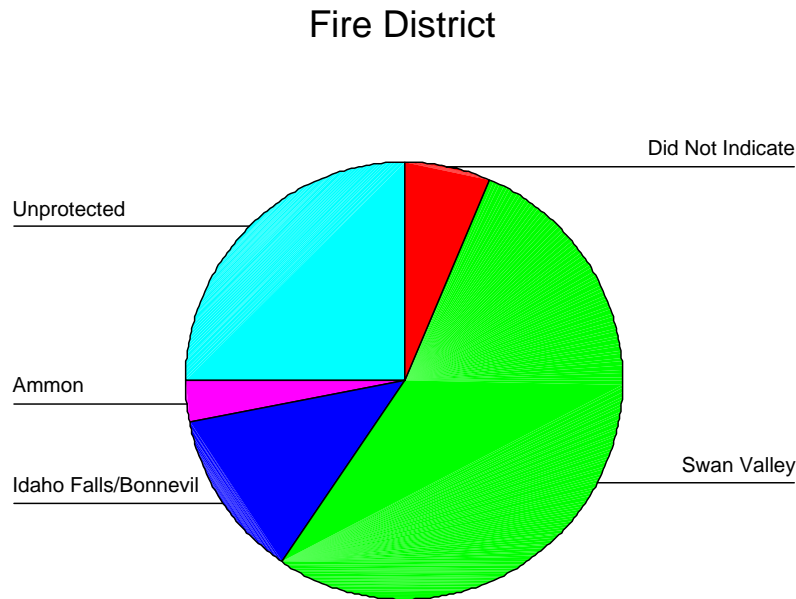
Homeowner Questionnaire

The results from the questionnaire are provided in detail in Appendix 4. There were 80 questionnaires mailed out. Roughly 25% of the questionnaires were returned. In addition, 12 questionnaires were completed at the public meeting held in Swan Valley on August 31, 2004. The following are highlights of the responses:

- ❑ 53% of the respondents owned property in Swan Valley.
- ❑ 63% responded that they had not participated in hazard reduction activities.
- ❑ 47% responded that they knew what to do if a wildfire affected their community.
- ❑ Only 44% indicated that if they weren't currently in a fire protection district that they would be in favor of being included in a new district.
- ❑ 40% of the respondents who lived outside of a fire protection district supported an increase in taxes to improve fire protection.
- ❑ 91% indicated that a Wildfire Public Education Program would be beneficial.
- ❑ 66% indicated that they would be willing to participate in wildland/urban interface mitigation activities.
- ❑ 53% indicated that a Web Page would be beneficial in providing information to them regarding Wildland/Urban Interface Mitigation.

Questionnaire results indicate that there is an appreciation and support of the need to reduce fuel loading in the summer home area. One of the largest concerns appears to be response times for properties located on the south side of the Snake River below the Palisades Dam.

The chart below illustrates the response by fire district.



Public Meetings/Input

A public meeting for residents of the Swan Valley Area was held on July 4, 2004 in conjunction with the Swan Valley Fire District's open house. The meeting was lightly attended. Those who attended were given general information on the status of the identification of hazards and vulnerabilities in the wildland/urban interface areas in Swan Valley and then given the opportunity to comment on the planning process. In addition, each attendee was asked to fill out the questionnaire found in Appendix 5.

A public meeting was held on August 31, 2004 in Swan Valley with homeowners who reside in Vulnerability Zones 1-5. Several homeowners were able to attend and provide comments. Swan Valley Fire personnel were able to provide information about the location of fire districts. In addition, information regarding defensible space planning, appropriate construction materials, and available fire fighting resources was presented.

Results from the public meetings and the questionnaire will be included in this section of the plan, and issues identified will be analyzed and documented in the Section 3 Hazard Assessment.

Section 5: Economic Analysis and Mitigation Actions

Introduction

The following economic analysis was conducted using the cost-benefit analysis guidance contained in Appendix 5. The analysis provides a starting point for the Bonneville County Wildland/Urban Interface Fire Mitigation Group and the responsible fire districts to begin mitigation project prioritization. It should be noted that while some projects provide an excellent return on investment other issues should also be included in the prioritization process. Life safety issues must always take precedence over costs. Other issues include:

- The number of structures in the subdivision
- The number of calls experienced in the area by the fire district
- Past fire history
- Seasonal use patterns
- Availability of funds
- Commitment and involvement of property owners
- Property aesthetics
- Environmental impacts
- Wildlife impacts

Vulnerability Zone Project Economic Analysis:

The following analysis was conducted based on a brief description of the project and the assumptions used to determine the scope and rough order of magnitude cost for the project. The information provided serves as a foundation for project prioritization and resource allocation. Detailed cost estimates may be required for grant applications.

The **implementing actions** are activities that the county agencies and citizens will propose and agree upon as those with potential to reduce risk in the wildland/urban interface.

- ✓ **Existing actions** - Activities that are currently in progress.
- ✓ **Short-term actions** - Activities that county agencies may implement with existing resources and authorities within one to two years.
- ✓ **Long-term actions** – These may require new or additional resources or authorities, and may take between one and five years to implement.

WUI Zone 1 – Hoffman Estates/McCoy Creek Road Area – High Risk

Short Term Actions:

- ✓ *Develop a wildland/urban interface public education program.*
- ✓ *Develop an evacuation plan.*

Project Description – The Alpine Fire District will conduct public education meetings for property owners in the WUI Zone. Educational materials will be provided. This project will be integrated with development of an evacuation program and will include WUI Zones 1 and 2.

Assumptions – The integrated program cost would be \$5,000 for this zone. If the program saved one home because of actions of the homeowner the ROI would be based on the cost divided into the value of the average property in the subdivision.

- Cost - \$5,000 (this zone)
- Valuation – \$68,357 avg. property value
- ROI –13.7 : 1

Responsible Party: Alpine Fire District

Resources: BLM Community at Risk Program

Proposed Due Dates: Public education program – 7/1/2005

Evacuation plan – 9/30/2005

- ✓ *Develop a fuels reduction program.*
- ✓ *Apply for grants to procure equipment used for mechanical treatment projects.*

Project Description – The Alpine Fire District will assist property owners in the development of a firewise/fuel reduction program. The project shall include mechanical treatments of properties within a 90’ radius of structures and will be based on both removal of fuels and the establishment of appropriate types of landscaping. Two mitigation projects will be integrated together, the development of the fuel reduction program and the procurement of the equipment to support the project.

Assumptions – The cost per acre for mechanical treatment is \$3,000, assume a 90’ treatment area would include work on only 1 acre or less of property and assume the average property value for the subdivision. The cost of the procurement of the equipment would be divided equally between all properties treated. The cost for the mechanical treatment equipment is estimated at \$11,000 divided by the number of properties treated.

- Cost – \$3,000 per acre/\$125.00 est. equipment cost per property
- Valuation - \$68,357 avg. property value
- ROI – 21.8 : 1

Responsible Party: Alpine Fire District

Resources: IDL/Forest Service Stevens Grant, BLM Community at Risk Program

Proposed Due Dates: Fuels reduction program - 4/30/2005

Grant applications – 3/30/2005

- ✓ *Develop a static water source.*

Project Description – The Alpine Fire District, along with property owners will work together to apply for grant funding to install three (3) 10,000 gallon underground static water tanks in the Hoffman Estates Subdivision.

Assumption – The cost for a 10,000 gallon water tank buried below the frost line is \$10,000. The State of Idaho Ratings Bureau requires a flow rate of 250 gallons a minute for two hours or a capacity of 30,000 gallons of water storage.

- Cost – \$30,000
- Valuation – \$68,357 avg. property value
- ROI – 2.3 : 1

Responsible Party: Alpine Fire District

Resources: To be determined

Proposed Due Date: 3/30/2006

Long Term Actions:

- ✓ *Improve the Forest Service road into Hoffman Estates*

Project Description – Conduct an engineering study focusing on improvement of the access roads into the Hoffman Estates Subdivision.

Assumption – The study, conducted by the Bonneville County Road and Bridge Department and the Forest Service will be used to further refine costs for road improvement.

- Cost – \$10,000
- Valuation – \$68,357 avg. property value
- ROI – 6.8 : 1 (this action only)

Responsible Party: Bonneville County Road Department/Caribou Targhee National Forest

Resources: Operating Budget (this task only)

Proposed Due Date: 6/30/2006

WUI Zone 2—North side of Palisades Reservoir from Wyoming line to Indian Creek – High Risk

Short Term Actions:

- ✓ *Develop a wildland/urban interface public education program.*
- ✓ *Improve roadways and develop evacuation procedures.*

Project Description – The Alpine Fire District will conduct public education meetings for property owners in the WUI Zone. Educational materials will be provided. This project will be integrated with development of an evacuation program and will include WUI Zones 1 and 2.

Assumptions – The integrated program cost would be \$5,000 for this zone plus an additional \$10,000 for an engineering study that will identify roadway improvements. If the program saved one home because of actions of the homeowner the ROI would be based on the cost divided into the value of the average property in the subdivision.

- Cost – \$15,000
- Valuation – \$78,936 avg. property value
- ROI – 5.3 : 1

Responsible Party: Alpine Fire District

Resources: BLM Community at Risk Program for education/evacuation and applicable agency funds for road improvement

Proposed Due Dates: Public education program – 7/1/2005

Improve roadways/Evacuation plan – 9/30/2005

- ✓ *Develop a fuels reduction program.*
- ✓ *Apply for grants to procure equipment used for mechanical treatment projects.*

Project Description – The Alpine Fire District will assist property owners in the development of a firewise/fuel reduction program. The project shall include mechanical treatments of properties within a 90' radius of structures and will be based on both removal of fuels and the establishment of appropriate

types of landscaping. Two mitigation projects will be integrated together, the development of the fuel reduction program and the procurement of the equipment to support the project.

Assumptions – The cost per acre for mechanical treatment is \$3,000, assume a 90' treatment area would include work on only 1 acre or less of property and assume the average property value for the subdivision. The cost of the procurement of the equipment would be divided equally between all the properties treated. The cost for the mechanical treatment equipment is estimated at \$11,000 divided by the number of properties treated.

- Cost – \$3,000 per acre/\$125.00 est. equipment cost per property
- Valuation - \$78,936 avg. property value
- ROI – 25.3 : 1

Responsible Party: Alpine Fire District

Resources: BLM Community at Risk Program, Stephens Grant

Proposed Due Dates: Fuels reduction program - 4/30/2005

Grant applications – 3/3/2005

✓ *Develop a static water source.*

Project Description – The Alpine Fire District, along with property owners will work together to apply for grant funding to install three (3) 10,000 gallon underground static water tanks in the three major subdivisions in this zone.

Assumption – The cost for a 10,000-gallon water tank buried below the frost line is \$10,000. The State of Idaho Ratings Bureau requires a flow rate of 250 gallons a minute for two hours or a capacity of 30,000 gallons of water storage.

- Cost – \$90,000
- Valuation – \$78,936 avg. property value for 3 properties
- ROI – 2.3 : 1

Responsible Party: Alpine Fire District

Resources: To be determined

Proposed Due Date: 3/30/2006

Long Term Actions:

None

WUI Zone 3 – North side of Palisades Reservoir from Indian Creek Road to Swan Valley Fire District Boundary - High Risk

Short Term Actions:

- ✓ *Develop a wildland/urban interface public education program.*
- ✓ *Improve roadways and develop evacuation procedures.*

Project Description – The Swan Valley Fire District will conduct public education meetings for property owners in the WUI Zone. Educational materials will be provided. This project will be integrated with development of an evacuation program and will include WUI Zones 4 and 5.

Assumptions – The integrated program cost would be \$5,000 for this zone plus an additional \$10,000 for an engineering study that will identify roadway improvements. If the program saved one home because of actions of the homeowner the ROI would be based on the cost divided into the value of the average property in the subdivision.

- Cost – \$15,000
- Valuation – \$78,936 avg. property value
- ROI – 5.3 : 1

Responsible Party: Swan Valley Fire District

Resources: BLM Community at Risk Program, FEMA Fire Prevention Grant, applicable agency funds for road improvement

Proposed Due Date: Public education program – 12/2005

Improve roadways/Evacuation plan – 12/2006

- ✓ *Develop a fuels reduction program.*
- ✓ *Apply for grants to procure equipment used for mechanical treatment projects.*

Project Description – The Swan Valley Fire District will assist property owners in the development of a firewise/fuel reduction program. The project shall include mechanical treatments of properties within a 90' radius of structures and will be based on both removal of fuels and the establishment of appropriate types of landscaping. Two mitigation projects will be integrated together, the development of the fuel reduction program and the procurement of the equipment to support the project.

Assumptions – The cost per acre for mechanical treatment is \$3,000, assume a 90' treatment area would include work on 1 acre or less of property and assume the average property value for the subdivision. The cost of the procurement of the equipment would be divided equally between all the properties treated. The cost for the mechanical treatment equipment is estimated at \$11,000 divided by the number of properties treated.

- Cost – \$3,000 per acre/\$125.00 equipment cost per property
- Valuation - \$78,936 avg. property value
- ROI – 25.3 : 1

Responsible Party: Swan Valley Fire District

Resources: BLM Community at Risk Program, Stevens Grant

Proposed Due Date: Fuels reduction program – 12/2006

Grant applications – 12/2005

- ✓ *Develop a static water source.*

Project Description – The Swan Valley Fire District, along with property owners, will work together to apply for grant funding to install three (3) 10,000-gallon underground static water tanks in the four major subdivisions in this zone.

Assumption – The cost for a 10,000 gallon water tank buried below the frost line is \$10,000. The State of Idaho Ratings Bureau requires a flow rate of 250 gallons a minute for two hours or a capacity of 30,000 gallons of water storage.

- Cost – \$120,000
- Valuation – \$78,936 avg. property value for 4 properties

- ROI – 2.3 : 1

Responsible Party: Swan Valley Fire District

Resources: To be determined

Proposed Due Date: 12/2005

Long Term Actions:

- ✓ *Expand the Swan Valley Fire District to cover this area.*

Project Description – Annexation of the individual subdivisions into the Swan Valley Fire District.

Assumption – Efforts to annex individual subdivision into the fire district results in saving one home.

- Cost – \$10,000
- Valuation – \$78,936
- ROI – 7.9 : 1

Responsible Party: Swan Valley Fire District

Resources: Operating Funds – Tax Levy

Proposed Due Date: 12/2005

WUI Zone 4 – Southwest side of Palisades Reservoir including Calamity and Palisades Summer Home Areas – High Risk

Short Term Actions:

- ✓ *Develop a wildland/urban interface public education program.*
- ✓ *Improve roadways and develop evacuation procedures.*

Project Description – The Swan Valley Fire District will conduct public education meetings for property owners in the WUI Zone. Educational materials will be provided. This project will be integrated with development of an evacuation program and will include WUI Zones 3 and 5.

Assumptions – The integrated program cost would be \$5,000 for this zone plus an additional \$10,000 for an engineering study that will identify roadway improvements. If the program saved one home because of actions of the homeowner the ROI would be based on the cost divided into the value of the average property in the subdivision.

- Cost – \$15,000
- Valuation – \$78,936 avg. property value
- ROI – 5.3 : 1

Responsible Party: Swan Valley Fire District

Resources: BLM Community at Risk Program, FEMA Fire Prevention Grant, applicable agency funds for road improvement

Proposed Due Date: Public education program – 12/2005

Improve roadways/Evacuation plan – 12/2006

- ✓ *Develop a fuels reduction program.*
- ✓ *Apply for grants to procure equipment used for mechanical treatment projects.*

Project Description – The Swan Valley Fire District will assist property owners in the development of a firewise/fuel reduction program. The project shall include mechanical treatments of properties within a 90’ radius of structures and will be based on both removal of fuels and the establishment of appropriate types of landscaping. Two mitigation projects will be integrated together, the development of the fuel reduction program and the procurement of the equipment to support the project.

Assumptions – The cost per acre for mechanical treatment is \$3,000, assume a 90’ treatment area would include work on 1 acre of less of property and assume the average property value for the subdivision. The cost of the procurement of the equipment would be divided equally between all the properties treated. The cost for the mechanical treatment equipment is estimated at \$11,000 divided by the number of properties treated.

- Cost – \$3,000 per acre/\$125.00 equipment cost per property
- Valuation - \$78,936 avg. property value
- ROI – 25.3 : 1

Responsible Party: Swan Valley Fire District

Resources: BLM Community at Risk Program, Stephens Grant

Proposed Due Date: Fuels reduction program – 12/2006

Grant applications – 12/2005

✓ *Develop a static water source.*

Project Description – The Swan Valley Fire District, along with property owners will work together to apply for grant funding to install three (3) 10,000-gallon underground static water tanks in the two major subdivisions in this zone.

Assumption – The cost for a 10,000-gallon water tank buried below the frost line is \$10,000. The State of Idaho Ratings Bureau requires a flow rate of 250 gallons a minute for two hours or a capacity of 30,000 gallons of water storage.

- Cost – \$60,000
- Valuation – \$78,936 avg. property value for 2 properties
- ROI – 2.3 : 1

Responsible Party: Swan Valley Fire District

Resources: To be determined

Proposed Due Date: 12/2005

Long Term Actions:

✓ *Expand the Swan Valley Fire District to cover this area.*

Project Description – Annexation of the individual subdivisions into the Swan Valley Fire District.

Assumption – Efforts to annex individual subdivisions into the fire district results in saving one home.

- Cost – \$10,000
- Valuation – \$78,936 avg. property value
- ROI – 7.9 : 1

Responsible Party: Swan Valley Fire District
Resources: Operating Funds – Tax Levy
Proposed Due Date: 12/2005

WUI Zone 5 – South side of Snake River from the Palisades Dam to Fall Creek Road including the Little Lemhi Scout Camp and Ta-Man-A-Wis Scout Camp – High Risk

Short Term Actions:

- ✓ *Work with the Bureau of Reclamation to reopen the road below the Palisades Dam for emergency vehicles.*

Project Description – The Swan Valley Fire Chief and Fire District Commissioners will meet with the Bureau of Reclamation and request that arrangements be made to provide access to emergency response vehicles below the Palisades Dam to Snake River Road during an emergency.

Assumptions: It is assumed that the only cost for project will be those associated with the writing of an Memorandum of Understanding between the Fire Protection District and the Bureau of Reclamation.

- Cost – \$2,000
- Valuation – \$291,242 avg. property value
- ROI – 145.6 : 1

Responsible Party: Swan Valley Fire District
Resources: Operating Funds
Proposed Due Date: 12/2006

- ✓ *Develop a wildland/urban interface public education program.*
- ✓ *Improve roadways and develop evacuation procedures.*

Project Description – The Swan Valley Fire District will conduct public education meetings for property owners in the WUI Zone. Educational materials will be provided. This project will be integrated with development of an evacuation program and will include WUI Zones 3 and 4.

Assumptions – The integrated program cost would be \$5,000 for this zone plus an additional \$10,000 for an engineering study that will identify roadway improvements. If the program saved one home because of actions of the homeowner the ROI would be based on the cost divided into the value of the average property in the subdivision.

- Cost – \$15,000
- Valuation – \$291,242 avg. property value
- ROI – 16.2 : 1

Responsible Party: Swan Valley Fire District
Resources: BLM Community at Risk Program, FEMA Fire Prevention Grant, applicable agency funds for road improvement
Proposed Due Date: Public education program – 12/2005
Improve roadways/Evacuation plan – 12/2006

- ✓ *Develop a fuels reduction program.*
- ✓ *Apply for grants to procure equipment used for mechanical treatment projects.*

Project Description – The Swan Valley Fire District will assist property owners in the development of a firewise/fuel reduction program. The project shall include mechanical treatments of properties within a 90' radius of structures and will be based on both removal of fuels and the establishment of appropriate types of landscaping. Two mitigation projects will be integrated together, the development of the fuel reduction program and the procurement of the equipment to support the project.

Assumptions – The cost per acre for mechanical treatment is \$3,000, assume a 90' treatment area would include work on 1 acre or less of property and assume the average property value for the subdivision. The cost of the procurement of the equipment would be divided equally between all properties treated. The cost for the mechanical treatment equipment is estimated at \$11,000 divided by the number of properties treated.

- Cost – \$3,000 per acre/\$125.00 equipment cost per property
- Valuation - \$291,242 avg. property value
- ROI – 93.2 : 1

Responsible Party: Swan Valley Fire District

Resources: BLM Community at Risk Program, Stevens Grant

Proposed Due Date: Fuels reduction program – 12/2006

Grant applications – 12/2005

- ✓ *Develop a static water source.*

Project Description – The Swan Valley Fire District, along with property owners will work together to apply for grant funding to install two (2) 10,000-gallon underground static water tanks in the selected locations along Snake River Road.

Assumption – The cost for a 10,000-gallon water tank buried below the frost line is \$10,000. The State of Idaho Ratings Bureau requires a flow rate of 250 gallons a minute for two hours or a capacity of 30,000 gallons of water storage.

- Cost – \$20,000
- Valuation – \$291,242 avg. property value for 1 properties
- ROI – 14.6 : 1

Responsible Party: Swan Valley Fire District

Resources: To be determined

Proposed Due Date: 12/2005

Long Term Actions:

- ✓ *Reduce Swan Valley Fire Department response times by constructing a bridge across the Snake River at Irwin, Idaho.*

Project Description – Construct a 60' wide cement bridge across the Snake River at Irwin.

Assumptions – The cost for construction is based on \$80 a square foot for a 60' x 300' cement bridge structure. This project is based on the need to provide access to both the homes on the south side of the Snake River as well as to provide emergency medical treatment to residents and the youth camps also located in the area.

- Cost – \$1,800,000
- Valuation – \$291,242 avg. property value
- ROI – 0.2 : 1 Safety Issue/Public Recreation Issue

Responsible Party: Bonneville County Commissioners/Bonneville County Road and Bridge Dept.

Resources: Highway Funds

Proposed Due Date: 12/2015

- ✓ *Build a substation for the Swan Valley Fire District to cover areas on the south side of the Snake River.*

Project Description – Construction of a two-bay metal structure to be used as a Swan Valley Fire Department substation.

Assumption – The cost for this project is based on construction costs for similar structures. This task also assumes that volunteers are available on the south side of the Snake River to man the equipment housed in the station.

- Cost – \$150,000
- Valuation – \$291,242 avg. property value
- ROI – 1.9 : 1

Responsible Party: Swan Valley Fire District

Resources: General Obligation Bond and USDA RD Loan

Proposed Due Date: 12/2010

- ✓ *Expand the boundaries of the Swan Valley Fire District to include areas on the south side of the Snake River.*

Project Description – Annexation of the individual subdivisions into the Swan Valley Fire District.

Assumption – Efforts to annex individual subdivisions into the fire district results in saving one home.

- Cost – \$10,000
- Valuation – \$291,242 avg. property value
- ROI – 29.1 : 1

Responsible Party: Swan Valley Fire District

Resources: Operating Funds – Tax Levy

Proposed Due Date: 12/2005

WUI Zone 6 – Kelly Island riparian area between the north side of the Snake River and the Heise Road – Medium Risk

Short Term Actions:

- ✓ *Improve roadways and develop evacuation procedures.*

Project Description – The Bureau of Land Management will develop evacuation routes and supporting signage for the Kelly Island public areas.

Assumptions: The BLM will close roadways that are not safe for public use and will designate roadways for access and for evacuation routes.

- Cost – To be determined by BLM
- Valuation – N/A Public Access and Recreational Uses Only
- ROI – N/A Safety Issue

Responsible Party: BLM

Resources: BLM Operating Funds, applicable agency funds for road improvement

Proposed Due Date: Proposal will be presented to the BLM Field Office Manager for consideration by 12/04. Completion of this mitigation is dependent upon concurrence by the Field Office Manager, available budget and acceptable environmental effects analysis.

- ✓ *Develop a fuels reduction program.*

Project Description – The BLM will reduce fuel loading in the Kelly Island public access areas and designate safe fire areas.

Assumptions – The BLM's actions not only provide for safe access of the public to this area for recreational uses but also compliment fire mitigation actions taken by property owners in the WUI Zones in Jefferson and Madison Counties who are undertaking fuel reduction activities. Estimate Kelly Island as 640 acres and the cost for fuel reduction at \$3,000 per acre.

- Cost – \$1,920,000
- Valuation – N/A Public Access and Recreational Uses Only
- ROI – N/A Safety Issue

Responsible Party: BLM

Resources: BLM Operating Funds

Proposed Due Date: Proposal will be presented to the BLM Field Office Manager for consideration by 12/04. Completion of this mitigation is dependent upon concurrence by the Field Office Manager, available budget and acceptable environmental effects analysis.

Long Term Actions:

None

WUI Zone 7 – The CRP intermix on the east bench of the county west of Bone Road from Ririe Reservoir to the southern County boundary – Medium Risk

Short Term Actions:

- ✓ *Develop a wildland/urban interface public education program.*

Project Description – The Bonneville County Fire District #1 will conduct public education meetings for property owners in the WUI Zone. Educational materials will be provided.

Assumptions – The integrated program cost would be \$10,000 for this zone. If the program saved one home because of actions of the homeowner the ROI would be based on the cost divided into the value of the average property in the subdivision.

- Cost – \$10,000
- Valuation – \$87,721 avg. property value
- ROI – 8.8 : 1

Responsible Party: Bonneville Fire District #1
Resources: BLM Communities at Risk Program
Proposed Due Date: 12/2007

Long Term Actions:

- ✓ *Expand the boundary of the Bonneville County #1 Fire District to include unprotected areas.*

Project Description – Annexation of the individual subdivisions into the Bonneville County Fire District #1. Homeowners will be contacted and made aware of the opportunity to join the fire district by petition.

Assumption – Efforts to annex individual subdivisions into the fire district results in saving one home.

- Cost – \$10,000
- Valuation – \$87,721 avg. property value
- ROI – 8.8 : 1

Responsible Party: Bonneville Fire District #1
Resources: General Operating Funds – Tax Levy
Proposed Due Date: Homeowners contacted – 12/2007

- ✓ *Working with the U.S. Department of Agriculture, develop mitigation measures for CRP grounds in the Bone area.*

Project Description – The Bonneville County Fire District #1 will work with the USDA and the individual property owners to develop mitigation strategies for the CRP Land currently in the program and for future applications.

Assumptions – The mitigations undertaken will result in the decrease in wildfires on CRP Lands and will thereby reduce the risk to adjacent croplands and private structures.

- Cost – TBD
- Valuation – \$87,721 avg. property value/TBD crop values
- ROI – TBD

Responsible Party: Bonneville Fire District #1
Resources: To be determined
Proposed Due Date: 12/2007

WUI Zone 8 – The west end of the county from the west boundary of the City of Idaho Falls to the INEEL boundary – Medium Risk

Short Term Actions:

- ✓ *Develop a wildland/urban interface public education program.*

Project Description – The Bonneville County Fire District #1 will conduct public education meetings for property owners in the WUI Zone. Educational materials will be provided.

Assumptions – The integrated program cost would be \$5,000 for this zone. If the program saved one home because of actions of the homeowner the ROI would be based on the cost divided into the value of the average property in the subdivision.

- Cost – \$5,000
- Valuation – \$124,780
- ROI – 25.0 : 1

Responsible Party: Bonneville Fire District #1
Resources: BLM Communities at Risk Program
Proposed Due Date: 12/2007

- ✓ *Develop a fuels reduction program.*

Project Description – The Bonneville County Fire District #1 will assist property owners in the development of a firewise/fuel reduction program. The project shall include mechanical treatments of properties within a 90' radius of structures and will be based on both removal of fuels and the establishment of appropriate types of landscaping. Two mitigation projects will be integrated together, the development of the fuel reduction program and the procurement of the equipment to support the project.

Assumptions – The cost per acre for mechanical treatment is \$3,000, assume a 90' treatment area would include work on 1 acre or less of property and assume the average property value for the subdivision. The cost of the procurement of the equipment would be divided equally between all the properties treated. The cost for the mechanical treatment equipment is estimated at \$11,000 and will spread across all properties treated.

- Cost – \$3,000 per acre/\$125.00 est. per property
- Valuation - \$124,780 avg. property value
- ROI – 40.0 : 1

Responsible Party: Bonneville Fire District #1
Resources: BLM Communities at Risk Program
Proposed Due Date: 12/2007

Long Term Actions:

- ✓ *Expand the boundary of the Bonneville Fire District #1 to include unprotected areas west of Idaho Falls to the INEEL boundary.*

Project Description – Annexation of the individual subdivisions into the Bonneville County Fire District #1. Homeowners will be contacted and made aware of the opportunity to join the fire district by petition.

Assumption – Efforts to annex individual subdivisions into the fire district results in saving one home.

- Cost – \$10,000
- Valuation – \$124,780 avg. property value
- ROI – 12.5 : 1

Responsible Party: Bonneville Fire District #1

Resources: General Operating Funds – Tax Levy

Proposed Due Date: Homeowners contacted – 12/2007

Section 6: Plan Maintenance

The Plan maintenance process includes a schedule for monitoring and evaluating the programmatic outcomes established in the Plan annually, and producing a Plan revision every five years. This section describes how the county will integrate public participation throughout the Plan maintenance process.

Formal Review Process

The Plan will be evaluated on an annual basis to determine the effectiveness of programs, and to reflect changes that may affect mitigation priorities. The evaluation process includes an annual schedule and timeline and identifies the local agencies and organizations participating in Plan evaluation. The project facilitator or designee will be responsible for contacting the Wildland/Urban Mitigation Advisory Committee members and organizing the annual review. Group members will be responsible for monitoring and evaluating the progress of the mitigation strategies in the Plan.

The Committee will review the goals and action items to determine their relevance to changing situations in the county, as well as changes in State or Federal policy, and to ensure that they are addressing current and expected conditions. The Committee will also review the risk assessment portion of the Plan to determine if this information should be updated or modified, given any new available data. The coordinating organizations responsible for the various action items will report on the status of their projects, the success of various implementation processes, difficulties encountered, success of coordination efforts, and which strategies should be revised or removed.

The facilitator will assign the duty of updating the Plan to one or more of the committee members. The designated members will have three months to make appropriate changes to the Plan before submitting it to the Committee members. The Committee will also notify all holders of the county plan and private property owners when changes have been made. Every five years, the updated plan will be submitted to the State Wildfire Mitigation Officer and the Federal Emergency Management Agency for review.

Continued Public Involvement

Bonneville County is dedicated to involving the public directly in review and updates of the Plan. The Committee is responsible for the annual review and update of the plan. The public also will have the opportunity to provide input into Plan revisions and updates. Copies of the Plan will be catalogued and kept at all of the appropriate agencies in the county. The existence and location of these copies will be publicized in the local newspaper following each annual review and update.

A public meeting will be held after each annual evaluation, or when deemed necessary by the Committee. The meetings will provide the public a forum where they can express concerns, opinions, or new alternatives that can then be included in the Plan. The County Commission will be responsible for using county resources to publicize the annual public meetings and maintain public involvement.



Bonneville County - Idaho



Wildland/Urban Interface Fire Mitigation Plan

Appendices

November 19, 2004

Appendix 1

Meeting Minutes
Interagency Planning Committee

Bonneville County Wildfire Mitigation Planning Project Idaho Falls Meeting – 4/27/2004

Attendees:

Name	Phone	Email	Affiliation
Wes Jones	552-2627	wjones@ersglobal.net	ERS – Project Manager
Rick Fawcett	478-7982	fawcett@ats.com	ERS – Senior Consultant
Jared Loosli	523-3971	uconfd@firetec.com	Ucon Fire Chief
Kevin Eckersell	529-1290	keckersell@co.bonneville.id.us	Bonneville Co
Janet Cheney	529-1290 ext 1568	jcheney@co.bonneville.id.us	Bonneville Co
Robert Jamison	521-5507	calamitywater@cableone.net	Calamity Summer Home
Norm Showalter	233-4344		Calamity Summer Home
Dick Fowler	523-8758		Bonneville Fire District
Matt Morgan	529-3312	morganconstl@aol.com	Bonneville Fire District
Dean Ellis	529-1495	delis@ci.idaho.falls.id.us	City of Idaho Falls Fire Chief
Don Gossweiler	524-7620	Donald_gossweiler@blm.gov	BLM
Dean Philbrick	483-3473	swanfire@silverstar.com	Swan Valley Fire
Toni Philbrick	483-2109	tonirustyspur@aol.com	Swan Valley Fire
Ron Frazell	483-2209	rcf@srv.net	Swan Valley Fire
Dave Radford	529-1290 ext 1360	dradford@co.bonneville.id.us	Bonneville County Commissioner
Steven Serr	529-1290 ext 1386	sserr@co.bonneville.id.us	Bonneville County
Mike Taysom	529-1223	mtaysom@co.bonneville.id.us	Bonneville County EM
Kim Ragotzkie	525-7290	kragotsk@idfg.state.is.us	Idaho Dept. of Fish and Game
Clarence Nelson		cbnelson@cableone.net	Ammon Fire Department

Scope:

Emergency Response Solutions facilitated the first Bonneville County Wildland/Urban Interface Mitigation Planning session on April 27, 2004 at 9:00 a.m. in the Bonneville County EOC. The meeting provided the first opportunity to discuss the wildland/urban interface fire mitigation plan development and future implementation activities in support of the Bonneville County Wildfire Mitigation Planning project.

Provided:

All personnel in attendance were provided copies of an introduction to the National Fire Plan, the State of Idaho Fire Plan, the Project Scope, and a listing of requested reference materials.

- Don Gossweiler from BLM provided copies of a Fire History Map and a Vegetation Map for Bonneville County. Don also provided the RC&D Evaluation of Fire Department Needs in Bonneville County.
- Mike Taysom provided a list of potential participants developed in cooperation with the County Commissioners.

Discussion points:

- Discussed who should be invited to serve on the Interagency Planning Team, and what the expectations were from their participation.
- A discussion was held on the Basic Planning Process
- ERS requested that a map, depicting the boundary of the wildland/urban interface area, be provided by the County GIS Department.

- Discussed potential issues that might need to be addressed, including:
 - Calamity Summer Home Evacuation Routes
 - Cooperation from the BLM and Forest Service in define hazards.
 - Project Fuel Reduction Projects from Kelly Canyon to Pine Creek.
 - Integration of Fire and Mitigation Projects throughout the county.
- The web page for the Idaho Statewide Implementation Strategy for the National Fire Plan is located at:
<http://www2.state.id.us/lands/Natl%20Fire%20Plan/Idaho%20Implementation%20Strategy/Idaho%20Implementation%20Strategy%20Home.htm>
- Idaho Statewide Implementation Strategy for the National Fire Plan – reviewed the draft Wildfire Mitigation Plan format, and discussed how it complies with the guidelines.
- ERS requested Fire Histories and/or Fire Incident Maps from the individual Fire Departments if available. Additional Information Requested includes but is not limited to the following:
 - Names and Contact Information for Key Members of the Fire Protection Community
 - Annual Fire Plans from Targhee and Caribou National Forests
 - Annual Fire Plans from BLM
 - Fuel loading analysis from State Department of Lands, Forest, and BLM.
 - Annual Fire Operation Plans MOUs between rural fire districts, counties, cities, and federal agencies.
 - County Zoning Codes relating to construction in the Urban Interface areas
 - Zoning Maps
 - Drought Data from Bureau of Reclamation
 - County Emergency Plans
 - Fire Department Needs Assessments, List of Equipment, Level of Response Capability, Response Resources.
 - Maps of Fire District coverage areas
 - Maps or descriptions of water supplies
 - Community Evacuation Plans for rural subdivisions
 - Any historic public input on the issues
 - *Suggested Items of Concern – Such as:*
 - *High Fuel Areas*
 - *Inadequate Water Supplies*
 - *Inaccessible roadways*
 - *Inferior Bridges*
- ERS will provide a web page link to the Draft Mitigation Plan for use by the planning team and the community citizens.
- ERS will begin development of the Mitigation Plan Draft, and route it for review and comment as soon as the reference materials as made available.

The next meeting is scheduled for May 10th at 9:30 a.m. at Fire Station #2 in Swan Valley.

Bonneville County Wildfire Mitigation Planning Project Swan Valley Meeting – 5/10/2004

Attendees:

Name	Phone	Email	Affiliation
Wes Jones	552-2627	wjones@ersglobal.net	ERS – Project Manager
Rick Fawcett	478-7982	fawcett@ats.com	ERS – Senior Consultant
Jared Loosli	523-3971	uconfd@firetec.com	Ucon Fire Chief
Keith Birch	313-3446	kbirch@idl.state.id.us	IDL
John R. Therriault	529-1220	jtherriault@co.bonneville.id.us	Bonneville Co Emergency Management
Kevin Conran	524-7602	Kevin_Conran@blm.gov	BLM
Norm Showalter	233-4344	Tintype21@cableone.net	Calamity Summer Home
Dean Soelberg	520-3014		Sheep Creek Summer Home
B L Page	357-3625		Sheep Creek Summer Home
Dean Ellis	529-1495	delis@ci.idaho.falls.id.us	City of Idaho Falls Fire Chief
Don Gossweiler	524-7620	Donald_gossweiler@blm.gov	BLM
Dean Philbrick	483-3473	swanfire@silverstar.com	Swan Valley Fire
Toni Philbrick	483-2109	tonirustyspur@aol.com	Swan Valley Fire
Ron Frazell	483-2209	rcf@srv.net	Swan Valley Fire
Dave Radford	529-1290 ext 1360	dradford@co.bonneville.id.us	Bonneville County Commissioner
Dave Klaehn	483-2763	partyhoofs@silverstar.com	Swan Valley Fire
Kim Ragotzkie	525-7290	kragotsk@idfg.state.is.us	Idaho Dept. of Fish and Game
Clarence Nelson	589-3473	chief@ammonfire.com	Ammon Fire Department

Scope:

Emergency Response Solutions facilitated the second Bonneville County Wildland/Urban Interface Mitigation Planning session on May 10, 2004 at 9:30 a.m. in the Swan Valley Fire Station #2. The meeting provided the second opportunity to discuss the wildland/urban interface fire mitigation plan development, and future implementation activities in support of the Bonneville County Wildfire Mitigation Planning project.

Provided:

All personnel in attendance were provided copies of the requirements for the wildland/urban interface fire mitigation plan and a draft set of planning goals from ERS.

- John Therriault provided a copy of the Bonneville County Emergency Operations Plan to ERS.
- Kevin Conran provided a copy of the Caribou-Targhee Fire Plan to ERS.
- Dave Radford provided a map of the Fire Districts to ERS.
- Dean Philbrick made a presentation to the group on the fire hazards facing the Swan Valley Fire District, and provided an electronic copy of the presentation to ERS for inclusion in the plan.
- Don Gossweiler provided an electronic file to ERS containing the MOUs and annual operation plan between BLM and the Fire Districts.

Discussion points:

- Discussed the Plan adoption process. The Plan is to be submitted to BLM and IDL who submit them to the State Bureau of Disaster Services who submits to FEMA. Eleven Plans have been completed to date in the State and submitted. None have been approved.
- Discussed planning interface issues with Caribou County, Teton County, Bingham County, and the State of Wyoming.
- Discussed unprotected areas in the County.

- Discussed the need for code enforcement or revision.
- Discussed the need for increased public education with summer home residents.
- Discussed the need for increased mechanical treatment, and the requisite funding.
- Requested a list of absent homeowners so that they can be contacted.
- Discussed the need for secondary evacuation routes from summer homes and subdivisions.
- Discussed the lack of water storage and supply in the Swan Valley area.
- Need to improve pre-fire planning in rural areas of the County such as the following subdivisions:
 - Sheep Creek
 - McCoy Creek
 - Palisades
 - Calamity
 - Bear Creek
- Discussed requirements for protection on leased forestlands.
- Discussed burn permits, refuse collection, removal, and disposal.
- There needs to be more Forest Service Cooperation on issues facing private homeowners.

KEY ISSUES: The key issues are linked to Public Safety and Property Protection

- 1. Reduction of Fire Load**
- 2. Water Supply**
- 3. Access to Property**
- 4. Public Education**

Actions:

- All attendees were asked to provide comments on mission statement and goals to Rick Fawcett by Friday May 14, 2004.
- ERS will place the first rough draft of the Bonneville County on the ERS web site by May 18th 2004. The web site can be accessed at www.ersglobal.net.
- Participants are requested to provide ERS with any documented public input on the issues discussed as part of the process.
- The next meeting is scheduled for June 2nd at 9:30 a.m. at the Ammon City Fire Station on Ammon Road.

Bonneville County Wildfire Mitigation Planning Project
Ammon Meeting – 6/2/2004

Attendees:

Name	Phone	Email	Affiliation
Rick Fawcett	478-7982	fawcett@ats.com	ERS – Senior Consultant
Jared Loosli	523-3971	uconfd@firetec.com	Ucon Fire Chief
Kevin Conran	524-7602	Kevin_Conran@blm.gov	BLM
Dean Ellis	529-1495	delis@ci.idaho.falls.id.us	City of Idaho Falls Fire Chief
Don Gossweiler	524-7620	Donald_gossweiler@blm.gov	BLM
Ron Frazell	483-2209	rcf@srv.net	Swan Valley Fire
Dave Radford	529-1290 ext 1360	dradford@co.bonneville.id.us	Bonneville County Commissioner
Mike Taysom	529-1223	mtaysom@co.bonneville.id.us	Director Emergency Management
Kim Ragotzkie	525-7290	kragotsk@idfg.state.is.us	Idaho Dept. of Fish and Game
Clarence Nelson	589-3473	chief@ammonfire.com	Ammon Fire Department
Jeffery Freeburne	397-4772	mjfree@cdi.net	Calamity Water Users Association

Scope:

Emergency Response Solutions facilitated the third Bonneville County Wildland/Urban Interface Mitigation Planning session on June 2, 2004 at 9:30 a.m. in the Ammon Fire Station. The meeting provided the third is a series of opportunities to discuss and accept input into the wildland/urban interface fire mitigation plan development and future implementation activities in support of the Bonneville County Wildfire Mitigation Planning project.

Discussion points:

- **Status of Plan Development – Chapters 1-3 & 7 will be complete and ready for review on June 15, 2004**
 - Rough Draft on ERS Web Site password is *bonnevilleems*
 - There has been very little input into the Mission Statement and Goals. If there is additional input, please email it to Rick Fawcett
 - The Hazard Assessment process is underway, and will be complete when all structures are identified in the non-protected areas.
 - Ron Frazell provided an excellent assessment of the response times within the Swan Valley Fire District, which will be included in the hazard assessment.
 - Discussed the need to additional protection in areas outside of established fire districts.
 - Discussed additional mapping activities – Dave Radford, Mike Taysom, and Rick Fawcett will work together to define requirements for the County GIS department.
 - Dave Radford provided comments on the Public Survey. Those comments have been incorporated, and the revised survey is attached for review.
 - Public Participation will include:
 - Survey to Absent Homeowners in the Swan Valley area, and to residents in the non-protected areas. The survey also will be on the web site, and will be handed out at the Swan Valley Public Meeting.
 - Place and Time of Public Meetings
 - Swan Valley – July 4th at the Fire Station Open House
 - Bone – Under Consideration
 - Wayan – Under Consideration

- Discussed the need for some immediate public education regarding the planning effort. Kim Ragotskie will work with ERS and Chis Millgate at Channel 8 to put something together.
- ERS will work with BLM during the June 21st Wildland Prevention week to put together a newspaper article.
- **Alternative Development will be conducted during the July 12th Meeting. Issues will be taken from:**
 - **Previous RC&D Fire Department Surveys**
 - **Swan Valley Assessments**
 - **Hazard Assessment**
 - **Public Meetings and Survey**

Next Steps:

- Approve and Mail Public Survey
- Schedule Public Meetings – Swan Valley July 4th other TBD
- Schedule Group Meeting for Alternative Analysis – July 12, 2004
- Final Draft of Plan Review and Comment – August 15th
- Revise Comments
- Present to Commissioners

The next meeting will be July 12th from 10-1200 at the Bonneville County EOC.

Bonneville County Wildfire Mitigation Planning Project Idaho Falls Meeting – July 26, 2004

Attendees:

Name	Phone	Email	Affiliation
Shyne Brothers	552-2627	sbrothers@ersglobal.net	ERS – Principle Specialist
Rick Fawcett	478-7982	fawcett@ats.com	ERS – Senior Consultant
Kevin Conran	524-7602	Kevin_Conran@blm.gov	BLM
Don Gossweiler	524-7620	Donald_gossweiler@blm.gov	BLM
Dave Radford	529-1290 ext 1360	dradford@co.bonneville.id.us	Bonneville County Commissioner
Mike Taysom	529-1223	mtaysom@co.bonneville.id.us	Director Emergency Management
Keith Birch	313-3346	kbirch@idl.state.id.us	Idaho Department of Lands
Dennis Godfrey	547-2583	dengodem@allidaho.com	Caribou County Fire
Josse Allen	547-4749	jallen@caribouco.com	Caribou County

Emergency Response Solutions facilitated the third Bonneville County Wildland/Urban Interface Mitigation Planning session on July 26th at 10:00 a.m. in the Bonneville County EOC. The meeting provided the fourth in a series of opportunities to discuss and accept input into the wildland/urban interface fire mitigation plan development and future implementation activities in support of the Bonneville County Wildfire Mitigation Planning project.

Discussion points:

- *Status of Plan Development – All Chapters are drafted; additional work is being done on Chapters 2 and 3 prior to final development of the mitigation actions.*
 - Rough Draft on ERS Web Site password is [bonnevilleems](#)
 - The Hazard Assessment process is nearing completion; we are still looking at specific structures in the Hoffman subdivision located in the McCoy Creek area.
 - Discussed additional mapping activities – Shyne Brothers will work with the County GIS Department and BLM to see if a final map can be developed.
 - Caribou County Representatives were present to discuss interface issues between their mitigation planning efforts and the Bonneville County mitigation planning effort. Issues include:
 - Fire Protection in the Grays Lake/Wayan Area
 - Fire Protection and interface with the Alpine Fire District
 - Fire Protection for the McCoy Creek Area.
 - Don Gossweiler suggested that a map showing noxious weeds be obtained from the Bonneville County Weed Control Program. The relationship between the WUI and the weed control areas should then be evaluated.
 - Commissioner Radford would like ERS to talk to Steve Serr regarding Building Codes and Variances in the WUI areas.
 - The Public Survey has been sent out and responses are coming back. The survey was sent to:
 - Absent homeowners in the Swan Valley area and residents in the non-protected areas.

Next Steps:

- Invite Alpine Fire District to next meeting.
- Invite a representative of the NRCS to the next meeting to discuss CRP land.
- Complete the Public Survey
- Link vulnerable properties to mitigation alternatives
- Indicate vulnerable properties, and mitigation projects on the Bonneville County hazard map being developed.
- Develop final mitigation alternatives for economic analysis and ranking.

The next meeting will be August 13 from 10-1200 at the Bonneville County EOC.

**Bonneville County Wildfire Mitigation Planning Project
Idaho Falls Meeting - August 13, 2004**

Attendees:

Name	Phone	E-mail	Affiliation
Shyne Brothers	552-2627	sbrothers@ersglobal.net	ERS-Principle Specialist
Rick Fawcett	478-7982	fawcett@ats.com	ERS – Senior Consultant
Kevin Conran	524-7602	Kevin_Conran@blm.gov	BLM
Terri Potter	307-890-7581	bigbpotter@hotmail.com	Alpine Fire District
Mike Taysom	529-1223	mtaysom@co.bonneville.id.us	Director of Emergency Management
Steven Serr	529-1350 ext. 1386	sserr@co.bonneville.id.us	Bonneville County
Dean Philbrick	520-7242	Swanfire2@yahoo.com	Swan Valley Fire
Ron Frazell	483-2209	rcf@srv.net	Swan Valley Fire
Dave Radford	529-1290 ext 1360	dradford@co.bonneville.id.us	Bonneville County Commissioner

Emergency Response Solutions facilitated the fifth Bonneville County Wildland Urban Interface Mitigation Planning session on August 13th at 10:00 a.m. in the Bonneville County EOC. The meeting provided the fourth in a series of opportunities to discuss and accept input into the wildland/urban interface fire mitigation plan development and future implementation activities in support of the Bonneville County Wildfire Mitigation Planning project.

Discussion points:

The current status of the plan was discussed. The draft plan is available online at www.ersglobal.net. The password is bonnevilleems.

The majority of the hazard assessment activities have been completed. The Hoffman Estates area may require additional inspection.

Mike Taysom suggested adding a fire history narrative to the plan. The substantial number of fires may necessitate discussion of only the largest fires.

The need for a memorandum of understanding for the Grays Lake area was noted.

Inclusion of the Bone Road area within the hazard zones was discussed. Steven Serr noted that any new houses will be located on 60 acres or more. The density in this area will remain low. However, Kevin Conran indicated that the high occurrence of fire in this area suggests the need for it to be included into a fire district.

There is a need for a public meeting with Swan Valley homeowners to discuss the plan and receive additional input.

The need for indication of hazard zones on the map was discussed. Shyne Brothers will work with Janet Cheney to get these zones added. Also, the federal layer on the map will need to be separated into BLM and Forest Service areas.

The survey results were discussed.

The current reimbursement program for Wyoming homeowners was discussed.

The necessity for coordination with the Forest Service regarding Hoffman Estates was discussed.

Next Steps:

Comments in regard to the mitigation tasks need to be submitted by August 20, 2004.

Postcards need to be sent out to Swan Valley homeowners to invite them to the public meeting at 6 p.m. on August 31, 2004.

Appendix 2

Interagency Planning Group Public Meeting Minutes

Bonneville County Wildfire Mitigation Planning Project
Swan Valley Public Meeting – July 4, 2004

Emergency Response Solutions facilitated the first Bonneville County Wildland Urban Interface Mitigation Public Meeting on July 4, 2004 in Swan Valley. The meeting provided the first in a series of opportunities to gather and implement public comments into the wildland/urban interface fire mitigation plan. There was minimal public participation at this meeting.

**Bonneville County Wildfire Mitigation Planning Project
Swan Valley Public Meeting - August 31, 2004**

Attendees:

Name	Phone	E-mail	Affiliation
Rick Fawcett	478-7982	fawcett@dat.com	ERS – Senior Consultant
Shyne Brothers	552-2627	sbrothers@ersglobal.net	ERS-Principle Specialist
Neil and Sally Burrell	525-8122	neilbur@msn.com	Salisbury Tract
Loren and Donna Corbridge	397-4155		Lake View Drive (185)
Gary Hansen	522-9445		Salisbury Tract
Kim Burn	523-0530		Salisbury Tract
Carl Friedrich	523-2590	Pwaterdog@msn.com	Salisbury Tract
Bob Bratty	483-9609	Robert_B@juno.com	Salisbury Tract
Dave Radford	529-1350x1360	dradford@co.bonneville.id.us	County Commissioner
Norm Doering	529-1978		Salisbury Tract
Terri Potter	307-890-7581	bigbpotter@hotmail.com	Alpine Fire District
Karen and Jim Chick	483-4231	Karen_chick1@verizon.net	Snake River Road
Lindi Fox	483-6466	lfox@silverstar.com	
Vernon D. Schroeder	483-4274		
Ron Frazell	483-2209	rcf@srv.net	Swan Valley Fire
Judy Tweedy (Bob)	483-2645	riltweedy@silverstar.com	Park Lane resident
Don Gossweiler	524-7620		BLM
David and Linda Sargent	483-2061		
Troy Vias	483-3224		Valley Excavation
Dean Philbrick	520-7242	Swanfire2@yahoo.com	Swan Valley Fire
Ann and Tom Walsh	483-2305	twalsh@silverstar.com	
Tom and Barbara Dent	483-2445	keagydent@aol.com	Snake River Road
Jerry Freeburne	397-4772	mjfree@dcdi.net	Calamity Water User's Association
Flaye and Lee Sledge	483-0483	lsledge@tetontel.com	Garden Creek Wilderness Ranch
A.J. and Sandy Arave	524-8039	ajasandy@cableone.net	Sheep Creek Summer Homes
Brady J. Barkdull	787-2958	bmbarkdull@yahoo.com	Hoffman Summer Homes
Greg Chapin	524-1097	gchapin@qwest.net	Little Sheep Creek
Cheryl Park	522-5474	prk_plc@juno.com	
Garth and Charlotte Cordon	483-0806	gnc370@ida.net	Sheep Creek

Emergency Response Solutions facilitated the second Bonneville County Wildland Urban Interface Mitigation Public Meeting on August 31st at 6:00 p.m. in Swan Valley Fire Station #2. The meeting provided the second in a series of opportunities to gather and implement public comments into the wildland/urban interface fire mitigation plan. Several fire personnel were able to present information regarding defensible space planning, district response capabilities, and FireWise. In addition, homeowners were able to provide valuable comments and information.

A synopsis of the meeting follows:

- Rick Fawcett provided information in regard to plan development and future implementation.
- The current status of available fire fighting resources was discussed.
- Several homeowners asked questions if they are included in a fire district. Dean Philbrick was able to address these questions and provide homeowners with the requisite information.

- The cost of fire protection per year was discussed including Fire Protection Districts tax levy information.
- The status of previous and current mitigation actions was discussed.
- The proposed mitigation actions within the Bonneville plan were reviewed.
- Various grants were discussed.
- Fire personnel provided information in regard to defensible space, vegetation types, and appropriate construction materials.
- The individuals responsible for each WUI Zone were designated.
- Various costs associated with mitigation strategies were discussed.
- Homeowner insurance information was reviewed.

Appendix 3

RC&D

Composite Report

Bonneville County Fire Departments & Districts

Composite Report

Bonneville County Fire Departments & Districts

High Country Resource Conservation & Development

June 2003

Bonneville County, located in Southeastern Idaho, is part of the Upper Snake River Valley. Its eastern border also is the state border of Idaho and Wyoming. Bonneville is the fourth-largest county in the state. The present population is over 82,522 with most of the people living in and around the Idaho Falls area. The land area totals 1,897 square miles. It is part of the District 7 Health District and the High Country Resource Conservation and Development Area. Bonneville County includes four fire districts/departments within its boundaries. These include Ammon Fire Department, Greater Swan Valley Fire District, Idaho Falls Fire Department/District, and Ucon Fire Department.

Following is a composite of the needs identified for each of the Bonneville County Fire Districts. These are organized according to the major topics covered in the Fire Assessment including: Firefighting Program, Hazardous Materials Program, EMS Program, Training and Certification, Communication, Prevention and Inspection, and Public Education. Details of this needs list can be found in the respective Assessment Overview Reports for each District.

Local Fire Response:

The following concerns were expressed and documented in the Fire Department Assessment conducted in 2003 by the High County RC&D and validated during Interagency Group meetings by the District Fire Chiefs.

- Lack of adequate water supplies, water distribution systems, etc.
- Inaccessible structures
- Narrow roads and bridges
- Inadequate Protection Codes and Code Enforcement
- Lack of integrated communications, planning, preparedness, and response protocols
- Inadequate training of personnel
- Inadequate staffing and retention of volunteers
- Inadequate public education
- Problematic Fire District coverage and response times
- Need for additional response vehicles and equipment
- Need for maintenance and testing procedures
- Lack of Resources, assistance in obtaining grants and other funding

Swan Valley Fire District

The Greater Swan Valley Fire Protection District is a municipal fire protection district comprised of agricultural, range, and heavily forested land. The population swells from about 900 year-round residents to a summer population of 1,800 because of the area's many recreational opportunities. The population is anticipated to increase slightly. Most of the new residential development consists of expensive year-round and summer homes in the wildland/urban interface. A major hydroelectric dam is located about 10 miles upstream of Swan Valley and is considered a possible terrorist target.

Firefighting Program:

The Firefighting program area includes agricultural, rangeland, forest, wildland/urban interface, residential, business, high tech, and high risk. The area is considered high risk for urban interface fires and for terrorism. There are twenty-two firefighters, of which fourteen are trained in wildland/urban suppression. The District plans to add eight new firefighters this year. In addition, there are ten EMS personnel. The District responds to approximately thirteen calls annually. It is capable of a ten-minute response time for scene size up, personnel safety, initial attack, and water supply set up (e.g., port-a-tank tender operations and begin external attack with hand lines). There are neither reliable nor adequate water sources available to the area. The District relies solely on bodies of water in the area. The Fire Chief works full time while all other personnel are volunteers.

Firefighting Program

Existing Resources/Assets	Needs
<ul style="list-style-type: none"> <input type="checkbox"/> Paid (1) and volunteer personnel <input type="checkbox"/> 2 Stations, 6 bays each <input type="checkbox"/> 1,500 Structural/400 wildland total GPM capacity <input type="checkbox"/> 2 pumper tender (structure/wildland) <input type="checkbox"/> 2 structural vehicles/1 structure/wildland utility/3 wildland/1 utility/rescue lighting 	<ul style="list-style-type: none"> <input type="checkbox"/> Manuals on apparatus maintenance, testing, requirements, and pump operations <input type="checkbox"/> Current set of NFPA vehicle and equipment standards <input type="checkbox"/> Access bridges cross the Snake River to BLM/forest service lands <input type="checkbox"/> More maneuverable response vehicles <input type="checkbox"/> Low cost on-site HazMat training; proper equipment to handle HazMat incidents <input type="checkbox"/> More dry hydrants <input type="checkbox"/> Reserve fire pumps incorporated into the existing water system <input type="checkbox"/> Portable positive displacement pumps <input type="checkbox"/> Increased revenues through increased taxes, mill levies, and taxing districts <input type="checkbox"/> Low-cost on-site grant writing courses computer software <input type="checkbox"/> Courses on records maintenance

Hazardous Material

Existing Resources/Assets	Needs
<p>The District does not have a HazMat team. However, several members of the program are HazMat trained and are utilized until the appropriate systems arrive to handle the scene.</p>	

Training and Certification

Existing Resources/Assets	Needs
<ul style="list-style-type: none"> <input type="checkbox"/> Some NFPA, NWCG Standards <input type="checkbox"/> IFSTA Training Program <input type="checkbox"/> Written Standard Operating Procedures 	<ul style="list-style-type: none"> <input type="checkbox"/> Low-cost on-site training with certified instructors for all personnel <input type="checkbox"/> Computerized Training Modules <input type="checkbox"/> A PowerPoint projector that works in conjunction with a computer <input type="checkbox"/> Low cost on-site refresher and fire fighting training courses with certified instructors for all personnel

Communication

Existing Resources/Assets	Needs
<ul style="list-style-type: none"> <input type="checkbox"/> All vehicles radio-equipped <input type="checkbox"/> Have sufficient portable radios (multi-frequency adequate) <input type="checkbox"/> Respond to remote calls 	<ul style="list-style-type: none"> <input type="checkbox"/> Improved cellular telephones and radios <input type="checkbox"/> Consistent and accurate communications with surrounding departments

Prevention and Inspection

Existing Resources/Assets	Needs
<ul style="list-style-type: none"> <input type="checkbox"/> Open-burning inspections <input type="checkbox"/> Investigates fire causes and origins 	<ul style="list-style-type: none"> <input type="checkbox"/> Low-cost on-site training by certified instructors

Public Education

Existing Resources/Assets	Needs
<ul style="list-style-type: none"> <input type="checkbox"/> Conducts public education programs <input type="checkbox"/> Participates in public outreach 	<ul style="list-style-type: none"> <input type="checkbox"/> Identify sources of outside assistance to improve public awareness <input type="checkbox"/> Prepackaged presentations <input type="checkbox"/> Use of SCA students for home inspections

Idaho Falls Fire Department/Bonneville Fire District #1

The Idaho Falls Fire Department and District is one of the larger fire departments in Idaho; it is comprised of a municipal fire protection district, HazMat team, high-angle rescue, confined space, and swift water rescue capabilities. The community is experiencing some population growth and the business sector has grown with the addition of strip malls, super stores and professional buildings. Through the last census, Idaho Falls was ranked as the fourth largest city in Idaho. Idaho Falls straddles the Snake River and is surrounded by agricultural, rangeland, and rolling hills leading to the Snake River Plain.

Firefighting Program:

There are ninety-two personnel within the firefighting program, all of which are paid staff. Fire response includes structural protection, wildland fire suppression, EMS, HazMat, rescue, terrorist threat, and other special circumstances. The risk for wildland/urban interface fires are low, but there is a risk of terrorist attack. Wildland firefighting training has been completed by six firefighters. The Department responds to approximately 6,178 calls for service annually. Some adequate and reliable water sources are available through water mains, hydrants, and area bodies of water. In the District, the primary water sources are ditches and canals, which are only useable during the growing season. Tender operations are the only primary water source the remainder of the year. The organization has the capability of a ten-minute response time for scene size up, search and rescue, utilities, initial attack, command establishment, RIC team, water supply and firefighter safety.

Firefighting Program

Existing Resources/Assets	Needs
<ul style="list-style-type: none"> <input type="checkbox"/> 5 Stations, 4 bays per station on average <input type="checkbox"/> Paid personnel <input type="checkbox"/> 8,750 structural/ 2,000 wildland total GPM capacity <input type="checkbox"/> Grid access address system <input type="checkbox"/> Computerized record-keeping system <input type="checkbox"/> Fire response: structural, wildlands, HazMat, high risk, search & rescue, high tech, special circumstances <input type="checkbox"/> 7 structural vehicles; 2 structural/wildland vehicles <input type="checkbox"/> Meets ISO water flow requirements <input type="checkbox"/> Meets all national fire protection association standards 	<ul style="list-style-type: none"> <input type="checkbox"/> Add several light and 1 heavy brush unit <input type="checkbox"/> Extend city water distribution system into strategic areas within the district <input type="checkbox"/> Underground water tanks, wells, & pumps in strategic areas <input type="checkbox"/> Increase grants for one-time purchases, building and materials <input type="checkbox"/> Assistance with the grant writing process <input type="checkbox"/> A dedicated grant library <input type="checkbox"/> Current manuals for testing <input type="checkbox"/> Testing equipment <input type="checkbox"/> Grants for purchase of new testing equipment <input type="checkbox"/> On-site training for entire staff (refresher training & to bring all staff to same level; update training)

Hazardous Materials

Existing Resources/Assets	Needs
<ul style="list-style-type: none"> <input type="checkbox"/> Trained personnel <input type="checkbox"/> 2 Rescue vehicles <input type="checkbox"/> 1 HazMat vehicle <input type="checkbox"/> 1 lighting and generator vehicle 	<ul style="list-style-type: none"> <input type="checkbox"/> Latest and current training and equipment

EMS

Existing Resources/Assets	Needs
<ul style="list-style-type: none"> <input type="checkbox"/> Trained personnel <input type="checkbox"/> 7 ambulance vehicles 	<ul style="list-style-type: none"> <input type="checkbox"/> Grants for equipment purchases, training and vehicle replacement

Training and Certification

Existing Resources/Assets	Needs
<ul style="list-style-type: none"> <input type="checkbox"/> Firefighter structural protection <input type="checkbox"/> EMS basic <input type="checkbox"/> HazMat <input type="checkbox"/> IFSTA student manuals, videos, slides & CD programs <input type="checkbox"/> Some programs meet NFPA, NWCG <input type="checkbox"/> Utilizes IFSTA training program <input type="checkbox"/> Written standard operating procedures <input type="checkbox"/> Videos and materials 	<ul style="list-style-type: none"> <input type="checkbox"/> Subsidized training (Grants) <input type="checkbox"/> Training and instructional materials <input type="checkbox"/> Training materials <input type="checkbox"/> Certified instructor training

Communication

Existing Resources/Assets	Needs
<input type="checkbox"/> Responds to remote alarm calls <input type="checkbox"/> Portable radios <input type="checkbox"/> All vehicles radio equipped	<input type="checkbox"/> Repeaters

Prevention and Inspection

Existing Resources/Assets	Needs
<input type="checkbox"/> Fire prevention division <input type="checkbox"/> Fire code enforcement <input type="checkbox"/> Fire cause and origin investigations conducted	<input type="checkbox"/> None

Public Education

Existing Resources/Assets	Needs
<input type="checkbox"/> Public education programs <input type="checkbox"/> Outreach education and inspections <input type="checkbox"/> Specialty presentations	<input type="checkbox"/> None

Ammon Fire Department

The Ammon Fire Department is comprised of a municipal and mutual aid fire program. The community is experiencing rapid growth as its location bumps up against the eastern city limits of Idaho Falls. The business district has become an extension of the Idaho Falls business area at 17th Street. The City of Ammon plans to annex both to the east and to the south within the next several years.

There are thirty-four personnel within the firefighting program who are volunteer staff. Fire response includes protection for structures, terrorist threat, wildfires, and HazMat scene stabilization. The risk for wildland/urban interface fires is low, and the Department is unsure of its risk related to terrorist attacks. Wildland firefighting training has been completed by twenty-five firefighters. The Department reports that it responds annually to approximately 117 fire-related incidents. Adequate and reliable water sources are available through water mains, hydrants, and area bodies of water. It has the capability of a ten-minute response time including scene size-up, initial attack, water supply, search and rescue. The Department is starting an ICS system.

Firefighting Program

Existing Resources/Assets	Needs
<input type="checkbox"/> 1 station, 7 bays <input type="checkbox"/> Volunteer personnel <input type="checkbox"/> 4,650 structural and 100 wildland total GPM capacity <input type="checkbox"/> Grid access address system <input type="checkbox"/> Computerized record keeping system <input type="checkbox"/> Fire Response: structural (residential and business), wildlands, HazMat, high risk <input type="checkbox"/> 6 structural vehicles; 1 wildland vehicle <input type="checkbox"/> Meets ISO water flow requirements	<input type="checkbox"/> 1 additional station, 3 bays <input type="checkbox"/> Access codes to housing developments <input type="checkbox"/> 1 water tender <input type="checkbox"/> Grant writer <input type="checkbox"/> Grant coordinator <input type="checkbox"/> Records management software course <input type="checkbox"/> NFPA testing equipment

Training and Certification

Existing Resources/Assets	Needs
<input type="checkbox"/> Firefighter 1 structural protection <input type="checkbox"/> Wildland suppression awareness <input type="checkbox"/> Some programs meet NFPA, NWCG <input type="checkbox"/> Utilizes IFSTA training program <input type="checkbox"/> Written standard operating procedures <input type="checkbox"/> Videos and materials	<input type="checkbox"/> Records management software course <input type="checkbox"/> Distance learning system <input type="checkbox"/> Training materials <input type="checkbox"/> Certified instructor training

Communication

Existing Resources/Assets	Needs
<input type="checkbox"/> Responds to remote alarm calls <input type="checkbox"/> Portable radios <input type="checkbox"/> All vehicles radio equipped	<input type="checkbox"/> None

Prevention and Inspection

Existing Resources/Assets	Needs
<input type="checkbox"/> 1 certified inspector; 1 in training <input type="checkbox"/> Firehouse software for record keeping <input type="checkbox"/> Fire cause and origin investigations conducted	<input type="checkbox"/> Refresher code class

Public Education

Existing Resources/Assets	Needs
<input type="checkbox"/> Public education programs <input type="checkbox"/> Outreach education and inspections	<input type="checkbox"/> Prepackaged presentations

Ucon:

The Ucon Fire Department is a municipal program. Ucon is located on Highway 20 North of Idaho Falls. It is a slow-growing community comprised mostly of residential and small business areas. There are a few potato warehouses in the community with surrounding agricultural land.

Firefighting Program:

There are eighteen personnel within the firefighting program who are volunteer staff. Fire response includes protection for structures, HazMat, grass and car fires. The risk for wildland/urban interface fires and terrorism is minimal. The Department responds to approximately seven fire-related incidents annually. Adequate and reliable sources of water are available through water mains and hydrants. It has the capability of a ten-minute response time including tow pumpers, personnel, scene size-up and water supply. The Department's system requires one member to respond with apparatus, and the remainder to respond to the scene.

Firefighting Program

Existing Resources/Assets	Needs
<input type="checkbox"/> 1 station, 3 bays <input type="checkbox"/> Volunteer personnel <input type="checkbox"/> 2,500 structural/0 wildland total GPM capacity <input type="checkbox"/> Grid access address system <input type="checkbox"/> Computerized record-keeping system in progress <input type="checkbox"/> Fire response: structural (residential and business), wildlands, HazMat, high risk <input type="checkbox"/> 2 structural vehicles <input type="checkbox"/> Meets ISO water flow requirements	<input type="checkbox"/> Hydrant testing system <input type="checkbox"/> Library of fire-related grants <input type="checkbox"/> Grant writer/source of information <input type="checkbox"/> Record keeping computer and software <input type="checkbox"/> Records management software course <input type="checkbox"/> Grants to bring apparatus up to NFPA standards <input type="checkbox"/> Manuals of NFPA standards <input type="checkbox"/> Wildland firefighter training <input type="checkbox"/> Wildland firefighting equipment

Training and Certification

Existing Resources/Assets	Needs
<input type="checkbox"/> Firefighter structural protection <input type="checkbox"/> HazMat training <input type="checkbox"/> Flashover trailer and natural gas emergencies	<input type="checkbox"/> IFSTA training program

Communication

Existing Resources/Assets	Needs
<input type="checkbox"/> Responds to remote alarm calls <input type="checkbox"/> Some portable radios <input type="checkbox"/> All vehicles radio equipped	<input type="checkbox"/> Hand held radios <input type="checkbox"/> Multiple frequency capabilities

Prevention and Inspection:

The Department does not administer Fire Code regulations or conduct fire cause/origin investigations. The State Fire Marshal's Office is called in to respond and assist with such investigations.

Public Education

Existing Resources/Assets	Needs
<input type="checkbox"/> Public education programs <input type="checkbox"/> Outreach education and inspections	<input type="checkbox"/> Grants for handouts and pamphlets

Central Fire District

The Central Fire District is a combined municipal and fire protection district serving Rigby, Ririe, Menan and Lewisville in Jefferson County. These communities have experienced some growth, and are located North of Idaho Falls near Highway 20. Most of the Fire District's topography is rolling hills suitable for farming and ranching.

Firefighting Program

The Central Fire District has 75 paid personnel within the firefighting program. Fire response includes protection for structures, wildland suppression, EMS extrication, HazMat, and terrorist threat. The District responds to approximately 551 fire-related incidents annually. It has the capability of a 10-minute response time including scene size-up, ICS system, rapid entry team, water supply and initial attack. The District does not see itself at risk due to wildland urban interface or terrorist attacks. There are 62 firefighters trained in wildland suppression. It was reported that the District has some adequate and reliable water sources. The primary water supply sources include water mains, hydrants, bodies of water, and a District water tender system.

Firefighting Program

Existing Resources/Assets	Needs
<input type="checkbox"/> 4 Station, 18 Bays	<input type="checkbox"/> Add 3 Bays in Rigby; 2 Offices in Rigby;
<input type="checkbox"/> Paid personnel	1 HazMat Office and 1 Central Office
<input type="checkbox"/> 7,000 Structural/1,500 Wildland	<input type="checkbox"/> Dry hydrants
Total GPM Capacity	<input type="checkbox"/> Grants for one-time purchases
<input type="checkbox"/> Computerized record keeping	<input type="checkbox"/> Library of EMS/Fire related grants
system	<input type="checkbox"/> Computer and software Courses
<input type="checkbox"/> Fire Response: structural,	<input type="checkbox"/> Procedural plan for testing/recording
agricultural, residential &	information for equipment
business	
<input type="checkbox"/> 7 structural; 2	
structural/wildland & 4 wildland	
vehicles	

Hazardous Materials Program

The District does have a HazMat Team. This team works in conjunction with the Idaho Falls Fire Department. Mutual aid agreements are in place with the Forest Service, BLM, INEEL, Idaho Department of Lands, City of Roberts, and Madison County.

EMS Program

Existing Resources/Assets	Needs
<input type="checkbox"/> EMT Basic, Non-Transport	<input type="checkbox"/> Grants for training and materials
	<input type="checkbox"/> Improved EMS materials library

Training and Certification

Existing Resources/Assets	Needs
<input type="checkbox"/> Structural Protection, Wildland	<input type="checkbox"/> Wildlands Fire Training – all personnel
Fire Suppression, EMS, HazMat	trained to same level
and Rescue (Revis Training,	<input type="checkbox"/> On-site training by certified instructors
Swift Water, High Angle)	<input type="checkbox"/> Trained instructors
<input type="checkbox"/> Some NFPA, NWCG Standards	<input type="checkbox"/> Refresher courses
<input type="checkbox"/> Standard Operating Procedures	<input type="checkbox"/> Current NFPA student manuals &
<input type="checkbox"/> Limited Power Point	workbooks
presentations	<input type="checkbox"/> Video's (or ability to borrow or rent)
	<input type="checkbox"/> Power Point presentations
	<input type="checkbox"/> Training on presentation of courses

Communications

Existing Resources/Assets	Needs
<input type="checkbox"/> Responds to remote alarm calls <input type="checkbox"/> Portable radios <input type="checkbox"/> All vehicles radio equipped	<input type="checkbox"/> Programming so that all radios have same capabilities <input type="checkbox"/> Unified frequencies in all radios <input type="checkbox"/> Upgrade older hand-held radios

Prevention and Inspection

Existing Resources/Assets	Needs
<input type="checkbox"/> Fire Cause & Origin Investigations	<input type="checkbox"/> County to adopt code enforcement <input type="checkbox"/> Implement county Building Inspector position

Public Education

Existing Resources/Assets	Needs
<input type="checkbox"/> Outreach Education <input type="checkbox"/> Public Education Programs	<input type="checkbox"/> Grants to purchase handout literature

Caribou County Fire Department

Caribou County is located in Southeastern Idaho. The population has experienced virtually no growth with census population estimates of 7,397 as of July 1, 2001. The land area totals 1,799 square miles and is part of the District 7 Health District and the Bear River Resource Conservation and Development Area. Caribou County includes four fire districts/departments within its boundaries. These include Bancroft Fire Department, Caribou County Fire District, Soda Springs Fire Department and Grace Fire Department.

Firefighting Program

Existing Resources/Assets	Needs
<input type="checkbox"/> 1 Station, 4 bays for county fire and 1 for BLM <input type="checkbox"/> Paid personnel <input type="checkbox"/> Fire response: structural, EMS, Wildland, HazMat and High Angle	<input type="checkbox"/> 1 New Station with 1 bay <input type="checkbox"/> Need improved access to bays <input type="checkbox"/> 1 Classroom/Training Space <input type="checkbox"/> 1 Office and 1 Meeting Space <input type="checkbox"/> 2 light brush trucks <input type="checkbox"/> 3 Current NFPA Testing Manuals & Workbooks <input type="checkbox"/> Testing Equipment <input type="checkbox"/> Need additional grant funding and a grant writer/assistant with grant process <input type="checkbox"/> Need a grant resource library specific to EMS/Fire <input type="checkbox"/> Need to take a grant writing course <input type="checkbox"/> Improved Records Management System <input type="checkbox"/> 4 Desk Top Computers and software training <input type="checkbox"/> Improved Road Maintenance <input type="checkbox"/> 1 Underground Water Storage Tanks <input type="checkbox"/> 1 Well and pump <input type="checkbox"/> Upgrade Water System <input type="checkbox"/> Establish agreements with Farmers to Use Agricultural Pumps

Training and Certification

Existing Resources/Assets	Needs
<input type="checkbox"/> Firefighter structural protection <input type="checkbox"/> HazMat <input type="checkbox"/> Programs meet NFPA and NWCG standards <input type="checkbox"/> Utilizes IFSTA training program <input type="checkbox"/> Written standard operating procedures <input type="checkbox"/> Videos, books, overheads and other materials	<input type="checkbox"/> Wildlands Response Training <input type="checkbox"/> Training Aids: Videos, Slides, Table Top Simulators <input type="checkbox"/> Established Training Program <input type="checkbox"/> Inhouse Instructors <input type="checkbox"/> IFSTA Training Manuals & Workbooks <input type="checkbox"/> Computer-based Training

Communications

Existing Resources/Assets	Needs
<input type="checkbox"/> Responds to remote alarm calls <input type="checkbox"/> All vehicles radio equipped	<input type="checkbox"/> Need additional hand-held radios <input type="checkbox"/> New Base Station Radio

Prevention and Inspection

Existing Resources/Assets	Needs
<input type="checkbox"/> Investigate fire cause and origin	<input type="checkbox"/> Fire Code Enforcement Training <input type="checkbox"/> Fire Cause & Origin Investigations Training <input type="checkbox"/> County Adoption of Fire Codes <input type="checkbox"/> Fire Inspector

Public Education

Existing Resources/Assets	Needs
<input type="checkbox"/> Public education programs <input type="checkbox"/> Outreach education	<input type="checkbox"/> Pre-packaged Presentation/Instructional Materials <input type="checkbox"/> Handout Materials

Alpine Fire Department

Alpine Fire Department is located in northwest Wyoming in the northern end of Lincoln County. Idaho borders the service area on the west and north. The department covers areas located in Bonneville County from the state line on Highway 26 to Indian Creek (this is approximately 5 miles into Idaho). It provides emergency services to the homes in that area including Royal Vacation Homes. Also included in the service area are homes and private property that are located in Bonneville County from the state line north of Alpine running south to the Bonneville/Caribou County Line. The population on both sides of the state line has experienced steady growth for the last five years and is expected to continue. The population is estimated at around 3,000. The land area totals 481 square miles.

Firefighting Program

Existing Resources/Assets	Needs
<input type="checkbox"/> 1 Station, 8 bays/training-meeting room <input type="checkbox"/> 2 Class A Pumpers <input type="checkbox"/> 1 Rescue Truck <input type="checkbox"/> 2 Brush Trucks <input type="checkbox"/> 1 Water Tender <input type="checkbox"/> 2 ALS Ambulance <input type="checkbox"/> 2 acres in south end of the service area for future substation <input type="checkbox"/> Fire response: structural, wildland, extrication, EMS, ropes	<input type="checkbox"/> Replace 1 pumper <input type="checkbox"/> Replace 1 rescue truck <input type="checkbox"/> Paid personnel <input type="checkbox"/> Training materials <input type="checkbox"/> Laptop computer <input type="checkbox"/> Training burn building substation

Training and Certification

Existing Resources/Assets	Needs
<input type="checkbox"/> Fire members are required to be state certified <input type="checkbox"/> EMS members are required to be state certified <input type="checkbox"/> CPR/First Aid instructors <input type="checkbox"/> State certified EMS instructor <input type="checkbox"/> Adopted NFPA standards in 1989 <input type="checkbox"/> Utilize IFSTA training program <input type="checkbox"/> Written suggested operating procedures <input type="checkbox"/> Some videos, books and other material	<input type="checkbox"/> Laptop computer and projector <input type="checkbox"/> FF 1 and 2 training materials <input type="checkbox"/> Burn building

Communications

Existing Resources/Assets	Needs
<input type="checkbox"/> Base station <input type="checkbox"/> All vehicles radio equipped <input type="checkbox"/> All personnel radio and pager equipped	<input type="checkbox"/> Update existing equipment

Prevention and Inspection:

The Department does not administer Fire Code regulations or conduct fire cause/origin investigations. The State Fire Marshal's Office is called in to respond and assist with such investigations.

Public Education

Existing Resources/Assets	Needs
<input type="checkbox"/> Public education <input type="checkbox"/> Outreach programs	<input type="checkbox"/> None identified

Appendix 4

Public Participation Survey



Bonneville County Questionnaire Wildland Fire Hazard Mitigation Planning

This questionnaire is being provided to you on behalf of the Bonneville County Commissioners to solicit feedback, and aid in the development of the Bonneville County Wildland/Urban Interface Fire Mitigation Plan. The Plan seeks to reduce the threat of wildfire damage within the wildland/urban interface areas in the county through hazard identification, vulnerability assessment and risk mitigation. Mitigation measures will include, but are not limited to, wildfire prevention through reduction of fuels, increasing fire protection capabilities of communities, and public education. The goal of the program is to reduce the impact of wildfire spreading from public land onto private or community lands. You can help in this countywide effort by providing valuable information and comments, which will be used during the assessment process and in the development of potential mitigation alternatives for your community.

1. Which **Fire District** do you reside in?

Swan
Valley

Idaho Falls/ Bonneville
County Fire District #1

Ammon

Central

Unprotected

2. What specific locations within your community do you think are currently being exposed to extreme fire hazards and pose a wildfire risk to homes or property?

3. Have you participated in community-sponsored activities to reduce the risk of wildland fires or to protect residents from wildfires spreading from public land to private?

Yes

No

How can they be improved?

4. Would wildland fire education programs be beneficial?

Yes

No

5. Do you know what to do if a wildland fire affects your community?

Yes

No

6. Are you willing to support/participate in wildland/urban risk mitigation activities such as fuels reduction, code enforcement, road and bridge improvement, and/or education?

Yes

No

Please list those activities that you would be interested in participating or hearing about further.

7. If you are currently in an unprotected area would you be willing to be included in a current or new fire protection district?

Yes

No

8. If you are currently in an unprotected area would you be willing to improve your fire protection response level through increased property taxes if that taxation resulted in improved property protection and potential savings on homeowners' insurance?

Yes

No

9. Would a web page with wildland/urban interface fire mitigation information help keep the community informed?

Yes

No

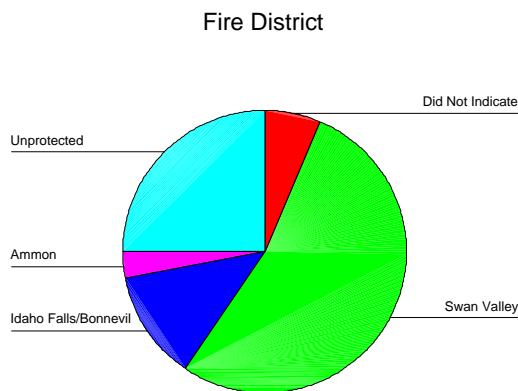
Additional questions or comments can be provided to EMERGENCY RESPONSE SOLUTIONS, Operations Manager Wes Jones 208-552-2627 or wjones@ersglobal.net.

Thank you for your assistance!

Bonneville County Questionnaire Results Wildland Fire Hazard Mitigation Planning

1. Which **Fire District** do you reside in?

	Frequency	Percent	Cumulative Percent
Did Not Indicate	2	6.3	6.3
Swan Valley	17	53.1	59.4
Idaho Falls/Bonneville County #1	4	12.5	71.9
Ammon	1	3.1	75.0
Unprotected	8	25.0	100.0
Total	32	100.0	



2. What specific locations within your community do you think are currently being exposed to extreme fire hazards and pose a wildfire risk to homes or property?

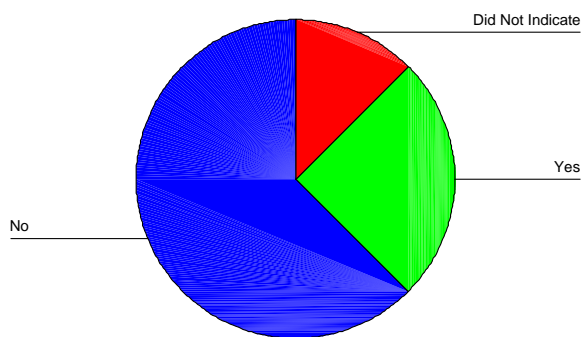
- ☐ Ammon and Iona
- ☐ The dead tree up bear creek
- ☐ Areas on the forest, left bank, side of the river
- ☐ Where ever people trespass on private property
- ☐ Increasing beetle killed forest areas
- ☐ West of Skyline
- ☐ We reside along the river, along Snake River Road, all state and federal lands should have a fuel reduction program instituted. The main problem is an inadequate road, often single lanes, congested and need a bridge.
- ☐ Canal behind home
- ☐ Calamity Summer Home Area
- ☐ All homes adjacent to public lands, i.e., Forest Service and BLM
- ☐ Not sure
- ☐ Fire works and forests – outdoor campfires
- ☐ Cabin properties on National Forest Land
- ☐ Summer home properties in Swan Valley district.
- ☐ In Swan Valley near the cabin
- ☐ CRP Fields full of weeds
- ☐ Don't know of any
- ☐ All of it, there is only one way in and out of the Hoffman Summer Homes

- ☐ Snake River Road
- ☐ Little Sheep Creek Road, Salisbury Estates, Irwin

3. Have you participated in community-sponsored activities to reduce the risk of wildland fires or to protect residents from wildfires spreading from public land to private?

	Frequency	Percent	Cumulative Percent
Did Not Indicate	4	12.5	12.5
Yes	8	25.0	37.5
No	20	62.5	100.0
Total	32	100.0	

Participated in Community Fire Prevention



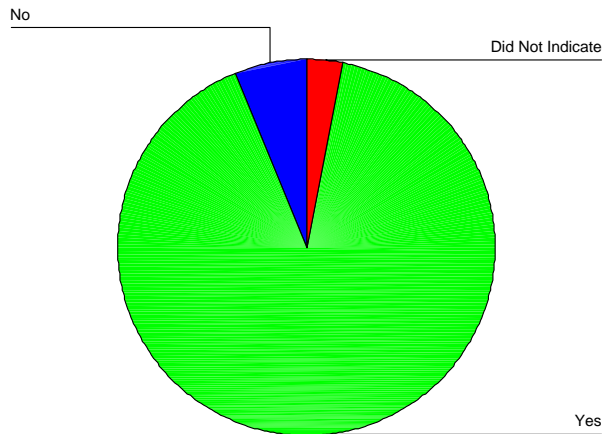
How can they be improved?

- ☐ I know of no such activities, if there are some please advise.
- ☐ We have no information about such programs or activities.
- ☐ Help in removing dead wood attended meetings – informed summer homeowners.
- ☐ I am not aware of activities to reduce risk of wildland fires in this community.
- ☐ Homeowners' association talks about safety but some people use outdoor fire pits and fireworks. Sparks from the campfires rise up into the pine trees; something bad is going to happen.
- ☐ The only activity that I am aware of in the Swan Valley area is Philbrick pushing people in summer home developments to eliminate fuel from around their properties.
- ☐ More dead tree removal on forest service lands
- ☐ Keep weeds and dead trees trimmed

4. Would wildland fire education programs be beneficial?

	Frequency	Percent	Cumulative Percent
Did Not Indicate	1	3.1	3.1
Yes	29	90.6	93.8
No	2	6.3	100.0
Total	32	100.0	

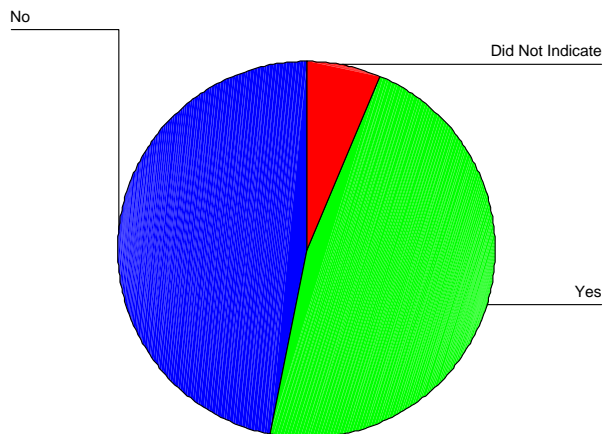
Wild Fire Education Beneficial



5. Do you know what to do if a wildland fire affects your community?

	Frequency	Percent	Cumulative Percent
Did Not Indicate	2	6.3	6.3
Yes	15	46.9	53.1
No	15	46.9	100.0
Total	32	100.0	

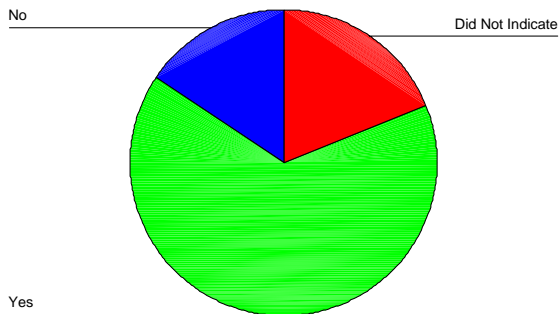
Know What to Do



7. Are you willing to support/participate in wildland/urban risk mitigation activities such as fuels reduction, code enforcement, road and bridge improvement, and/or education?

	Frequency	Percent	Cumulative Percent
Did Not Indicate	6	18.8	18.8
Yes	21	65.6	84.4
No	5	15.6	100.0
Total	32	100.0	

Willing to Participate

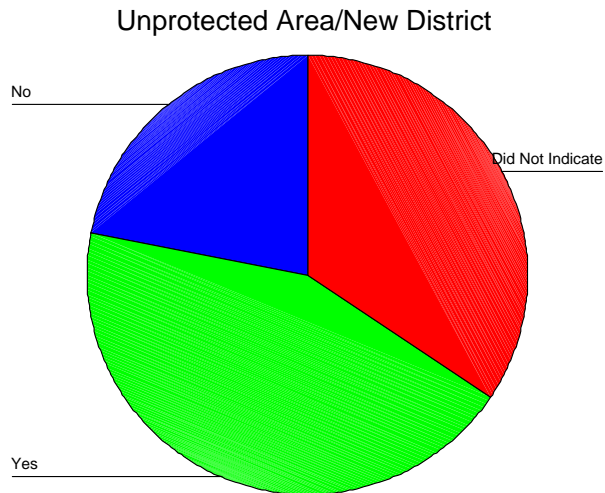


Please list those activities that you would be interested in participating or hearing about further.

- ☐ Road Improvement and Fuels Reduction
- ☐ Road and Bridge improvement and fire protection education.
- ☐ Education
- ☐ Road and Bridge Improvement, present road and bridge make fire protection and equipment moot in Swan Valley.
- ☐ Education
- ☐ Fuels Reduction
- ☐ Fuels Reduction, Road and Bridge Improvement
- ☐ Fuels Reduction Education
- ☐ Improvement of Snake River Road, Possible Bridge at Irwin
- ☐ How to be included in protection district

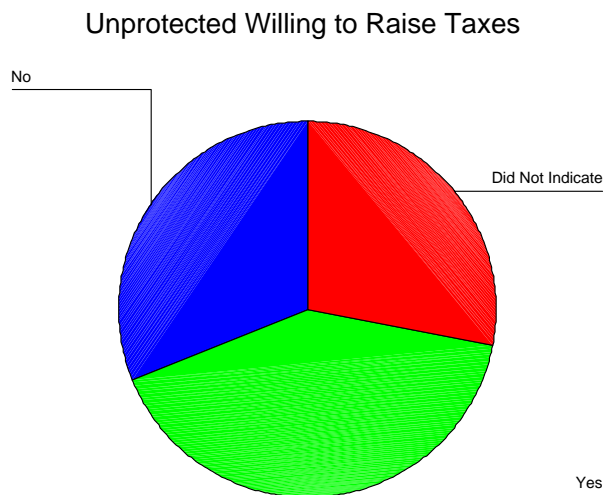
7. If you are currently in an unprotected area would you be willing to be included in a current or new fire protection district?

	Frequency	Percent	Cumulative Percent
Did Not Indicate	11	34.4	34.4
Yes	14	43.8	78.1
No	7	21.9	100.0
Total	32	100.0	



8. If you are currently in an unprotected area would you be willing to improve your fire protection response level through increased property taxes if that taxation resulted in improved property protection and potential savings on homeowners' insurance?

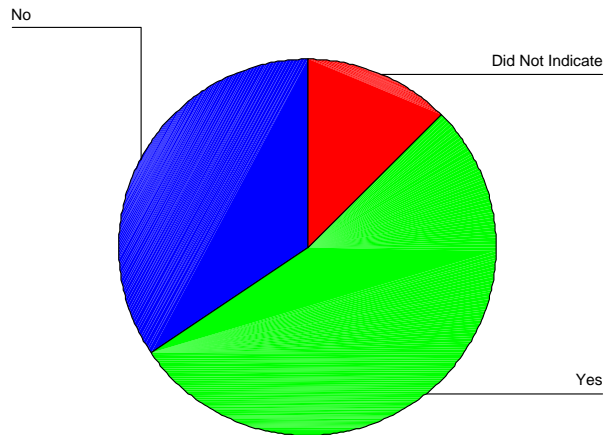
	Frequency	Percent	Cumulative Percent
Did Not Indicate	9	28.1	28.1
Yes	13	40.6	68.8
No	10	31.3	100.0
Total	32	100.0	



9. Would a web page with wildland/urban interface fire mitigation information help keep the community informed?

	Frequency	Percent	Cumulative Percent
Did Not Indicate	4	12.5	12.5
Yes	17	53.1	65.6
No	11	34.4	100.0
Total	32	100.0	

Would a Web Page be Beneficial



Appendix 5

Economic Analysis Guidance

Economic Analysis Guidance

Using the guidance found below, the Interagency Planning Group will evaluate all implementing actions to establish a prioritized ranking. In addition to examining the estimated economic cost/benefit analysis, implementing actions also must be ranked based on the impacts to the community or social structure of Bonneville County as a whole. The Guidance is included in the plan at this point simply to identify procedural steps necessary to establish implementation priorities.

Fire Mitigation Economic Analysis Guidance

Benefit/cost analysis is a key mechanism used by the Idaho State Bureau of Disaster Services, the Federal Emergency Management Agency, and other state and federal agencies in evaluating wildfire mitigation projects, and is required by the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended. This guide outlines several approaches for conducting economic analysis of wildfire mitigation projects. It describes the importance of implementing mitigation activities, different approaches to economic analysis of mitigation strategies, and methods to calculate costs and benefits associated with mitigation strategies. Information in this section is derived in part from: The Federal Emergency Management Agency Publication 331, Report on Costs and Benefits of Wildfire Mitigation.

This guide is not intended to provide a comprehensive description of benefit/cost analysis, nor is it intended to provide the details of economic analysis methods that can be used to evaluate local projects. It is intended to (1) raise benefit/cost analysis as an important issue, and (2) provide a description of how economic analysis will be used to evaluate fire mitigation implementing actions discussed in Section 5.

Mitigation Strategies

Mitigation activities reduce the cost of disasters by minimizing property damage, injuries, potential loss of life, and by reducing emergency response costs, which would otherwise be incurred. Evaluating wildfire mitigation provides decision-makers with an understanding of the potential benefits and costs of an activity, as well as a basis upon which to compare alternative projects.

Evaluating mitigation projects is a complex and difficult undertaking, which is influenced by many variables.

- ❑ Wildfires affect all segments of the communities they strike, including individuals, businesses, and public services such as fire, police, utilities, and schools.
- ❑ While some of the direct and indirect costs of disaster damages are measurable, some of the costs are non-financial and difficult to quantify in dollars.
- ❑ Many of the impacts of such events produce “ripple-effects” throughout the community, greatly increasing the disaster’s social and economic consequences.

While not easily accomplished, there is value, from a social and public policy perspective, in assessing the positive and negative impacts from mitigation activities, and obtaining an instructive benefit/cost comparison. Otherwise, the decision to pursue or not pursue various mitigation options would not be based on an objective understanding of the net benefit or loss associated with these actions.

Economic Analysis Approaches for Mitigation Strategies

The approaches used to identify the costs and benefits associated with wildfire mitigation strategies, measures, or projects fall into two general categories: benefit/cost analysis and cost-effectiveness analysis. The distinction between the two methods is the way in which the relative costs and benefits are measured. Additionally, there are several approaches to assessing the value of mitigation for public sector and private sector activities.

Benefit/cost Analysis

Benefit/cost analysis is used in wildfire mitigation to show if the benefits to life and property protected through mitigation efforts exceed the cost of the mitigation activity. Conducting benefit/cost analysis for a mitigation activity can assist communities in determining whether a project is worth undertaking now, in order to avoid disaster related damages later. Benefit/cost analysis is based on calculating the frequency and severity of a hazard, avoid future damages, and risk. In benefit/cost analysis, all costs and benefits are evaluated in terms of dollars, and a net benefit/cost ratio is computed to determine whether a project should be implemented (i.e., if net benefits exceed net costs, the project is worth pursuing). A project must have a benefit/cost ratio greater than 1 in order to be funded.

Cost-Effectiveness Analysis

Cost-effectiveness analysis evaluates how best to spend a given amount of money to achieve a specific goal. This type of analysis, however, does not necessarily measure costs and benefits in terms of dollars. Determining the economic feasibility of mitigating wildfire can also be organized according to the perspective of those with an economic interest in the outcome. Hence, economic analysis approaches are covered for both public and private sectors as follows.

Investing in public sector mitigation activities

Evaluating mitigation strategies in the public sector is complicated because it involves estimating all of the economic benefits and costs regardless of who realizes them, and potentially to a large number of people and economic entities. Some benefits cannot be evaluated monetarily, but still affect the public in profound ways. Economists have developed methods to evaluate the economic feasibility of public decisions that involve a diverse set of beneficiaries and non-market benefits.

Investing in private sector mitigation activities

A private sector mitigation project may occur on the basis of one of two approaches. It may be mandated by a regulation or standard, or it may be economically justified on its own merits. A building or landowner, whether a private entity or a public agency, required to conform to a mandated standard may consider the following options:

1. Request cost sharing from public agencies;
2. Dispose of the building or land either by sale or demolition;
3. Change the designated use of the building or land, and change the wildfire mitigation compliance requirement; or
4. Evaluate the most feasible alternatives, and initiate the most cost effective wildfire mitigation alternative.

The sale of a building or land triggers another set of concerns. For example, real estate disclosure laws can be developed which require sellers of real property to disclose known defects and deficiencies in the property, including earthquake weaknesses and hazards to prospective purchasers. Correcting deficiencies can be expensive and time consuming, but their existence can prevent the sale of the building. Conditions of a sale regarding the deficiencies and the price of the building can be negotiated between a buyer and seller.

Conducting Economic Analysis

Benefit/cost analysis and cost-effectiveness analysis are important tools in evaluating whether or not to implement a mitigation activity. The framework, which will be used for evaluating the Bonneville County Urban/Wildland Fire Mitigation Alternatives, is outlined below:

1. Identify the Alternatives

Alternatives for reducing risk from wildfires can include structural projects to enhance disaster resistance, education and outreach, and acquisition or demolition of exposed properties, among others. Different mitigation projects can assist in minimizing risk to wildfires, but do so at different economic costs.

2. Calculate the Costs and Benefits

Choosing economic criteria is essential to systematically calculating costs and benefits of mitigation projects and selecting the most appropriate alternative. Potential economic criteria to evaluate alternatives include:

❑ Determine the project cost

This may include initial project development costs, and repair and operating costs of maintaining projects over time.

❑ Estimate the benefits.

Projecting the benefits or cash flow resulting from a project can be difficult. Expected future returns from the mitigation effort depend on the correct specification of the risk and the effectiveness of the project, which may not be well known. Expected future costs depend on the physical durability and potential economic obsolescence of the investment. This is difficult to project. Estimating the costs and benefits of a hazard mitigation strategy can be a complex process. Employing the services of a specialist can assist in this process. These considerations will also provide guidance in selecting an appropriate salvage value. Future tax structures and rates must be projected. Financing alternatives must be researched, and they may include retained earnings, bond and stock issues, and commercial loans.

❑ Consider costs and benefits to society and the environment

These are not easily measured, but can be assessed through a variety of economic tools including existence value or contingent value theories. These theories provide quantitative data on the value that people attribute to physical or social environments. Even without hard data, however, impacts of structural projects to the physical environment or to society should be considered when implementing mitigation projects.

❑ Determine the correct discount rate

Determination of the discount rate can just be the risk-free cost of capital, but it may include the decision maker's time preference and also a risk premium. Inflation factors also should be considered.

3. Analyze and Rank the Alternatives

Once costs and benefits have been quantified, economic analysis tools can rank the alternatives. Two methods for determining the best alternative given different costs and benefits include net present value and internal rate of return.

Net present value

The net present value is the value of the expected future returns of an investment minus the value of expected future cost expressed in today's dollars. If the net present value is greater than the project costs, the project may be determined feasible for implementation. Selecting the discount rate, and identifying the present and future costs and benefits of the project, calculates the net present value of projects.

Internal Rate of Return

Using the internal rate of return method to evaluate mitigation projects provides the interest rate equivalent to the dollar returns expected from the project. Once the rate has been calculated, it can be compared to rates earned by investing in alternative projects. Projects may be feasible to implement when the internal rate of return is greater than the total costs of the project. Once the mitigation projects are ranked on the basis of economic criteria, decision-makers can consider other factors such as risk, project effectiveness, and economic, environmental, and social returns in choosing the appropriate project for implementation.

Calculating Economic Benefits of Mitigation

The estimation of economic returns, which accrue to building or landowner's because of wildfire mitigation, is difficult. Owners evaluating the economic feasibility of mitigation should consider reductions in physical damages and financial losses. A partial list follows:

- ☐ Building damages avoided
- ☐ Content damages avoided
- ☐ Inventory damages avoided
- ☐ Rental income losses avoided
- ☐ Relocation and disruption expenses avoided
- ☐ Proprietor's income losses avoided

These parameters can be estimated using observed prices, costs, and engineering data. The difficult part is to correctly determine the effectiveness of the wildfire mitigation project and the resulting reduction in damages and losses. Equally as difficult is assessing the probability that an event will occur. The damages and losses should only include those that will be borne by the owner. The salvage value of the investment can be important in determining economic feasibility. Salvage value becomes more important over the life of the assets. This is important because most businesses depreciate assets over a period of time.

Additional Costs from Wildfires

Property owners should also assess changes in a broader set of factors that can change as a result of a large wildfire. These are usually termed "indirect" effects, but they can have a very direct effect on the economic value of the owner's building or land. They can be positive or negative, and include changes in the following:

- ☐ Commodity and resource prices
- ☐ Availability of resource supplies
- ☐ Commodity and resource demand changes
- ☐ Building and land values
- ☐ Capital availability and interest rates
- ☐ Availability of labor
- ☐ Economic structure
- ☐ Infrastructure
- ☐ Regional exports and imports
- ☐ Local, state, and national regulations and policies
- ☐ Insurance availability and rates

Changes in the resources and industries listed above are more difficult to estimate, and require models that are structured to estimate total economic impacts. Total economic impacts are the sum of direct and indirect economic impacts. Total economic impact models usually are not combined with economic feasibility models. Many models exist to estimate total economic impacts of changes in an economy. Decision-makers should understand the total economic impacts of natural disasters in order to calculate the benefits of a mitigation activity. This suggests that understanding the local economy is an important first step in being able to understand the potential impacts of a disaster, and the benefits of mitigation activities.

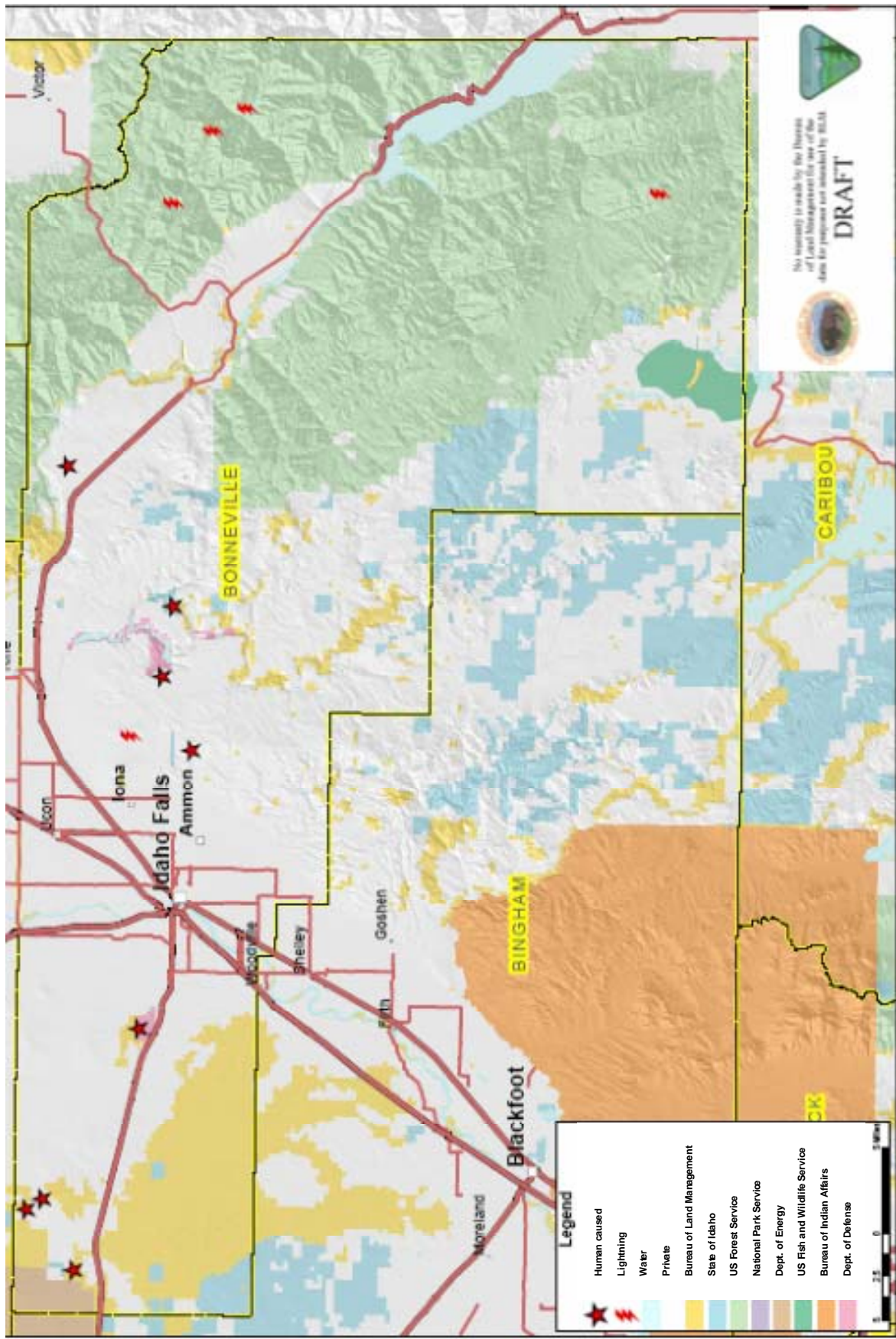
Additional Considerations

Conducting an economic analysis for potential mitigation activities can assist decision-makers in choosing the most appropriate strategy for their community to reduce risk and prevent loss from wildfires. Economic analysis can also save time and resources from being spent on inappropriate or non-feasible projects. Benefit/cost analysis is complicated, and the numbers may divert attention from other important issues. It is important to consider the qualitative factors of a project associated with mitigation that cannot be evaluated economically.

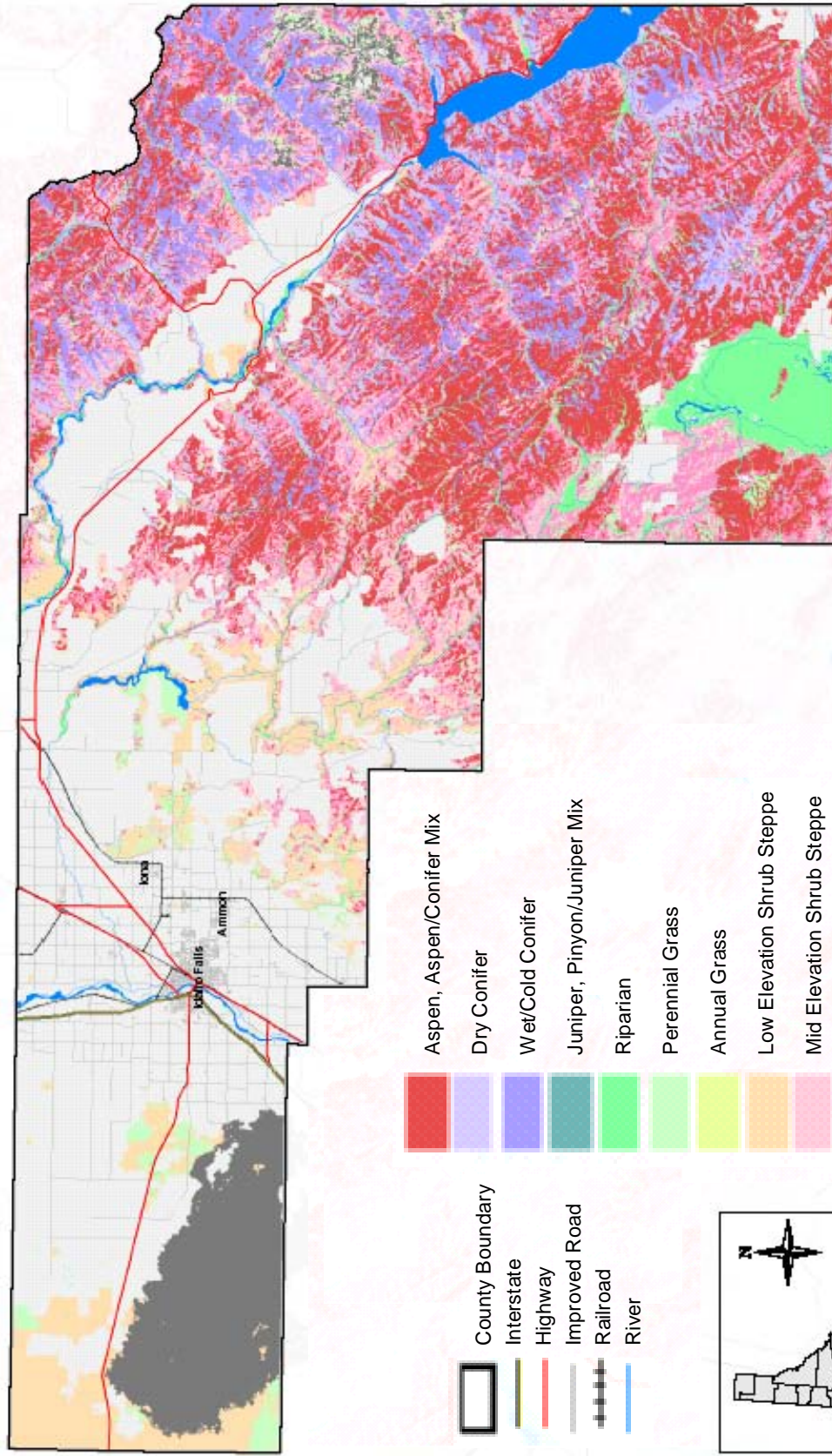
There are alternative approaches to implementing mitigation projects. Many communities are looking toward developing multi-objective projects. With this in mind, opportunity rises to develop strategies that integrate wildfire mitigation with projects related to watersheds, environmental planning, community economic development, and small business development, among others. Incorporating wildfire mitigation with other community projects can increase the viability of project implementation.

Appendix 6

Maps

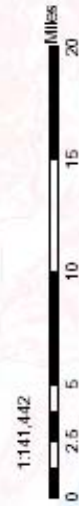
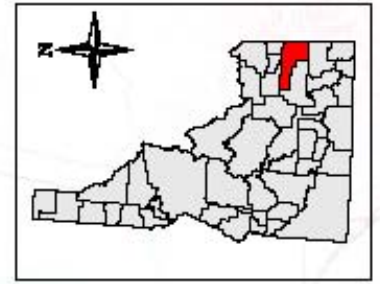


Bonneville County Wildfire Mitigation Vegetation Map



- Aspen, Aspen/Conifer Mix
- Dry Conifer
- Wet/Cold Conifer
- Juniper, Pinyon/Juniper Mix
- Riparian
- Perennial Grass
- Annual Grass
- Low Elevation Shrub Steppe
- Mid Elevation Shrub Steppe
- Mountain Shrub
- Salt Desert Shrub
- Lava, Rock, Barren
- Other

- County Boundary
- Interstate
- Highway
- Improved Road
- Railroad
- River



This map was created by the Bonneville County Planning Department for the purpose of wildfire mitigation planning. It is not intended to be used for any other purpose. The map is a draft and is subject to change without notice. DATE: 4/20/2024 FILE: U:\projects\bonnevillecounty_mitigation\bonneville_veg.pdf

WUI Zone 6

WUI Zone 8

WUI Zone 5 4

WUI Zone 3

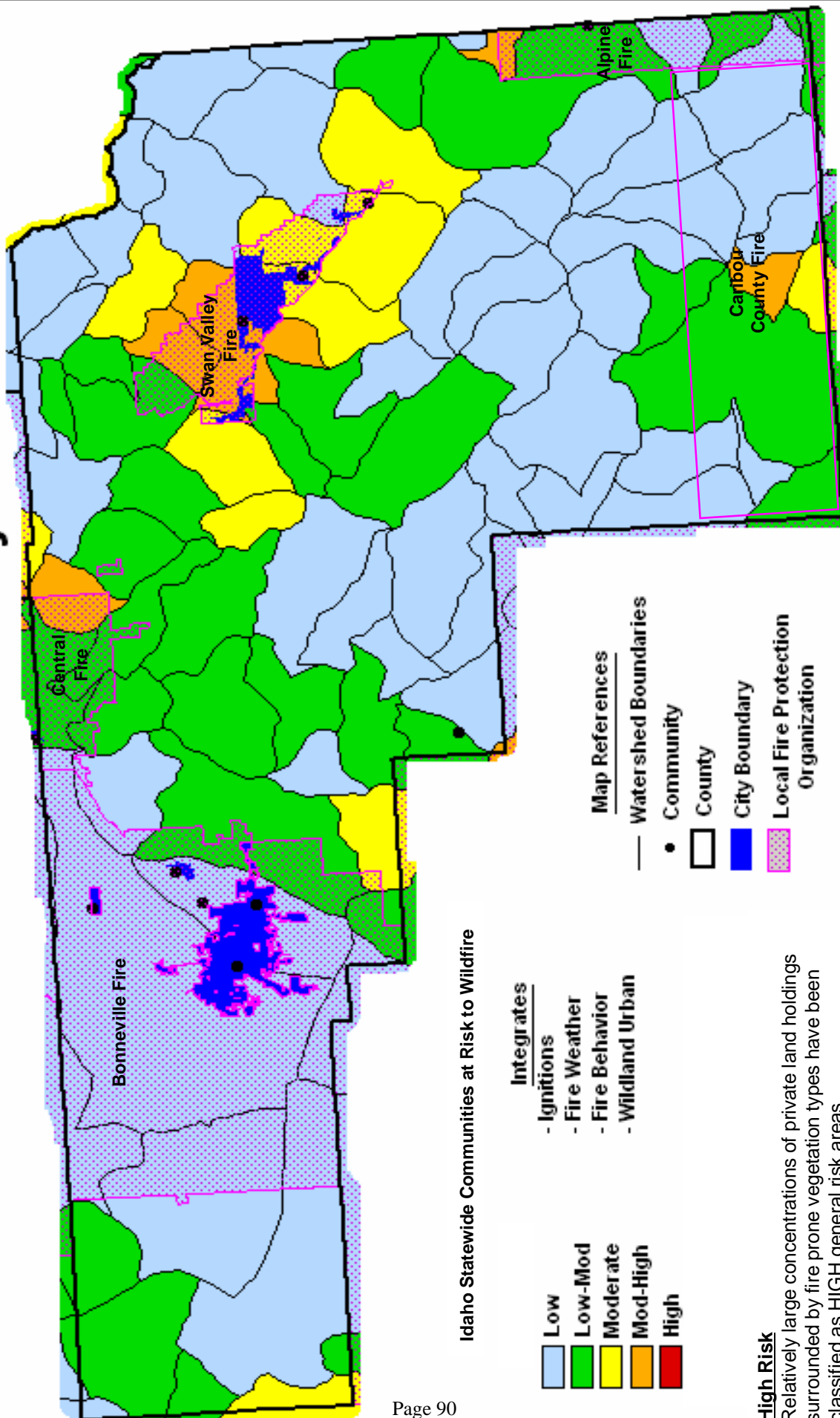
Zone 2

WUI Zone 1

WUI Zone 7

Alpine Fire

Bonneville County



Idaho Statewide Communities at Risk to Wildfire

High Risk

Relatively large concentrations of private land holdings surrounded by fire prone vegetation types have been classified as HIGH general risk areas.

Moderate Risk

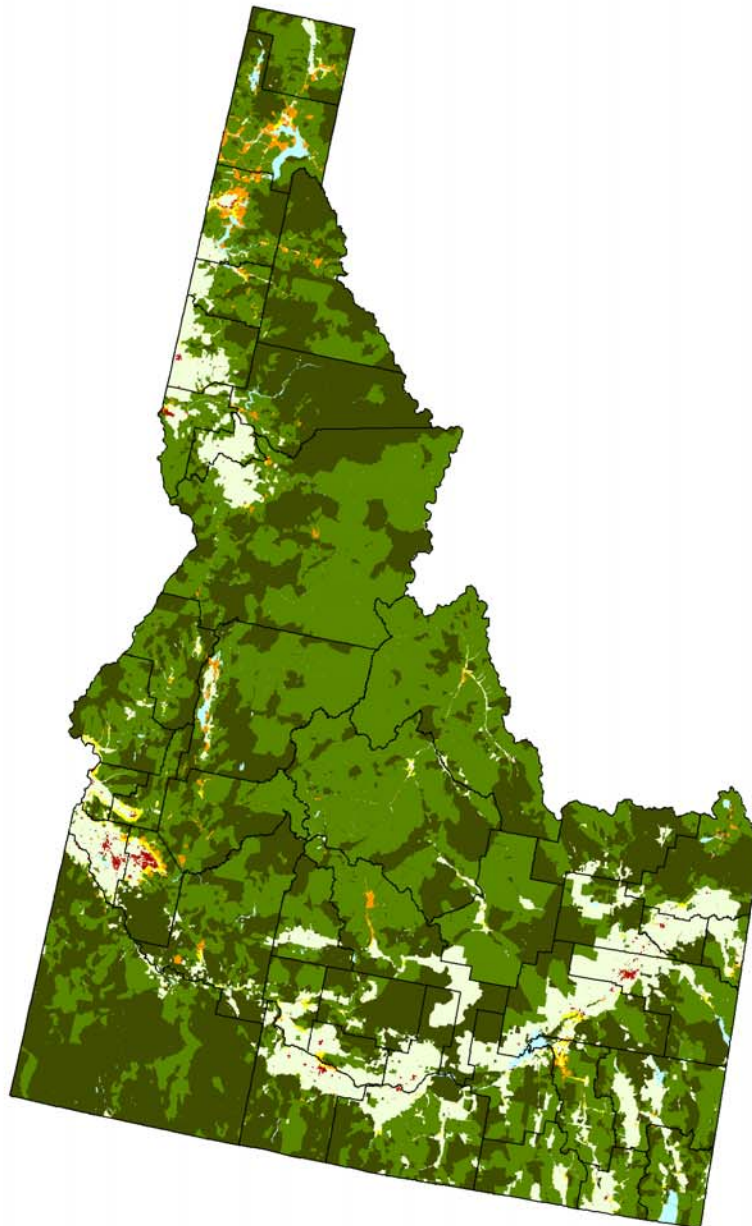
Areas with scattered individual campgrounds, isolated developments or improvements and or vegetation that could have undesired effects from wildland fire have been classified as MODERATE general risk areas.

Low Risk

An area with few improvements and or vegetation that has a high potential for beneficial effects from wildland fire has been classified as LOW general risk area.

Idaho

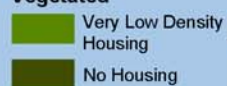
Wildland Urban Interface 2000



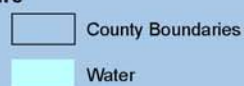
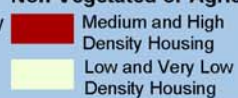
WUI



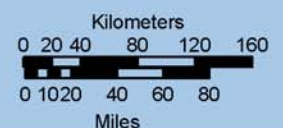
Non-WUI Vegetated



Non-Vegetated or Agriculture



Map Version: January 2004



Research funded by the USDA Forest Service



North Central Research Station
NC-4902 Natural Environments
for Urban Populations
Evanston, IL 60201

Contact: John Dwyer Susan Stewart
(847)866-9311 ext. 17 (847)866-9311 ext. 13
jdwyer@fs.fed.us sistewart@fs.fed.us

Research conducted at the University of Wisconsin by APL and SILVIS



Applied Population Laboratory
Department of Rural Sociology
Madison WI 53706

Contact: Roger Hammer
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Spatial Analysis for Conservation and Sustainability
Department of Forest Ecology and Management
Madison WI 53706

Sherry Holcomb, Jason McKeefy
Contact: Volker Radeloff
radeloff@facstaff.wisc.edu

- Intermix WUI is >50% vegetated and has at least low housing density
- Interface WUI is not vegetated, has at least low housing density, and is within 2.414 km of an area that is >75% vegetated and >5 sq. km in size
- Housing density is measured in units per sq. km. Density classes are very low (<6.17), low (6.17-49.21), medium (49.21-741.31), and high (>741.31)
- Vegetation includes forest, shrub, grassland, transitional or wetland but not agriculture (NLCD 1992/1993)
- Mapping units are 2000 US census blocks (US Census Bureau)
- Definition is based on the Federal Register (USDI/USDA 2001, vol. 66: 751)

Appendix 7

Bonneville County Hazard Identification

Swan Valley Fire District – Summer Home Area Assessment



Evidently no Fire Plan



Heavy Fuel – No Water Supply



Too close for comfort



Two examples of trailers with a roof built over them

Roads too narrow and steep



One road in and only one way out

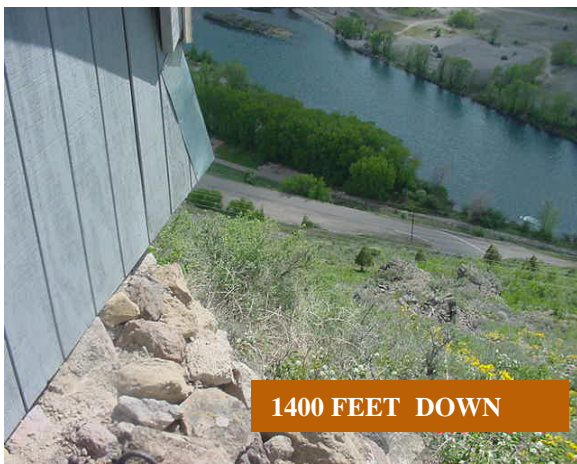


No defensible space

No defensible space



Cliff dwelling



1400 FEET DOWN



HEAVY FUEL



Ririe Reservoir Campground



Home in Snake River riparian zone



Little Lemhi Scout Camp



Typical fuel loading in unprotected summer home areas
No evacuation routes
No warning systems



Willow Creek Canyon - Bone Area



CRP Land /Willow Creek Bone Area